


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>	
<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Greater Monument Butte G-18-9-17	
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> MONUMENT BUTTE	
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> GMBU (GRRV)	
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY						<b>7. OPERATOR PHONE</b> 435 646-4825	
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052						<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com	
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-72106			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>	
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>	
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>	
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>	
<b>LOCATION AT SURFACE</b>	1947 FNL 693 FWL	SWNW	18	9.0 S	17.0 E	S	
<b>Top of Uppermost Producing Zone</b>	1270 FNL 1300 FWL	NWNW	18	9.0 S	17.0 E	S	
<b>At Total Depth</b>	984 FNL 1588 FWL	NENW	18	9.0 S	17.0 E	S	
<b>21. COUNTY</b> DUCHESE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1052		<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 20		
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 764		<b>26. PROPOSED DEPTH</b> MD: 6168 TVD: 6168		
<b>27. ELEVATION - GROUND LEVEL</b> 5467			<b>28. BOND NUMBER</b> WYB000493		<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478		
<b>ATTACHMENTS</b>							
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>							
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER				<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)				<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)				<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
<b>NAME</b> Mandie Crozier			<b>TITLE</b> Regulatory Tech			<b>PHONE</b> 435 646-4825	
<b>SIGNATURE</b>			<b>DATE</b> 11/24/2010			<b>EMAIL</b> mcrozier@newfield.com	
<b>API NUMBER ASSIGNED</b> 43013504990000			<b>APPROVAL</b>  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	5.5	0	6168		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	6168	15.5			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	8.625	0	300		
Pipe	Grade	Length	Weight			
	Grade J-55 ST&C	300	24.0			

NEWFIELD PRODUCTION COMPANY  
GREATER MONUMENT BUTTE G-18-9-17  
AT SURFACE: (LOT #2) SW/NW SECTION 18, T9S, R17E  
DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1390'
Green River	1390'
Wasatch	5930'
Proposed TD	6168'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation (Oil)      1390' – 5930'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval	Date Sampled
Flow Rate	Temperature
Hardness	pH
Water Classification (State of Utah)	Dissolved Calcium (Ca) (mg/l)
Dissolved Iron (Fe) (ug/l)	Dissolved Sodium (Na) (mg/l)
Dissolved Magnesium (Mg) (mg/l)	Dissolved Carbonate (CO <sub>3</sub> ) (mg/l)
Dissolved Bicarbonate (NaHCO <sub>3</sub> ) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)	Dissolved Total Solids (TDS) (mg/l)



#### 4. **PROPOSED CASING PROGRAM**

##### a. Casing Design: Greater Monument Butte G-18-9-17

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950	1,370	244,000
						17.53	14.35	33.89
Prod casing 5-1/2"	0'	6,168'	15.5	J-55	LTC	4,810	4,040	217,000
						2.45	2.06	2.27

##### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure – gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe =	13.0 ppg
Pore pressure at surface casing shoe =	8.33 ppg
Pore pressure at prod casing shoe =	8.33 ppg
Gas gradient =	0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

##### b. Cementing Design: Greater Monument Butte G-18-9-17

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
			161			
Prod casing Lead	4,168'	Prem Lite II w/ 10% gel + 3% KCl	288	30%	11.0	3.26
			939			
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363	30%	14.3	1.24
			451			

\*Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours

- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

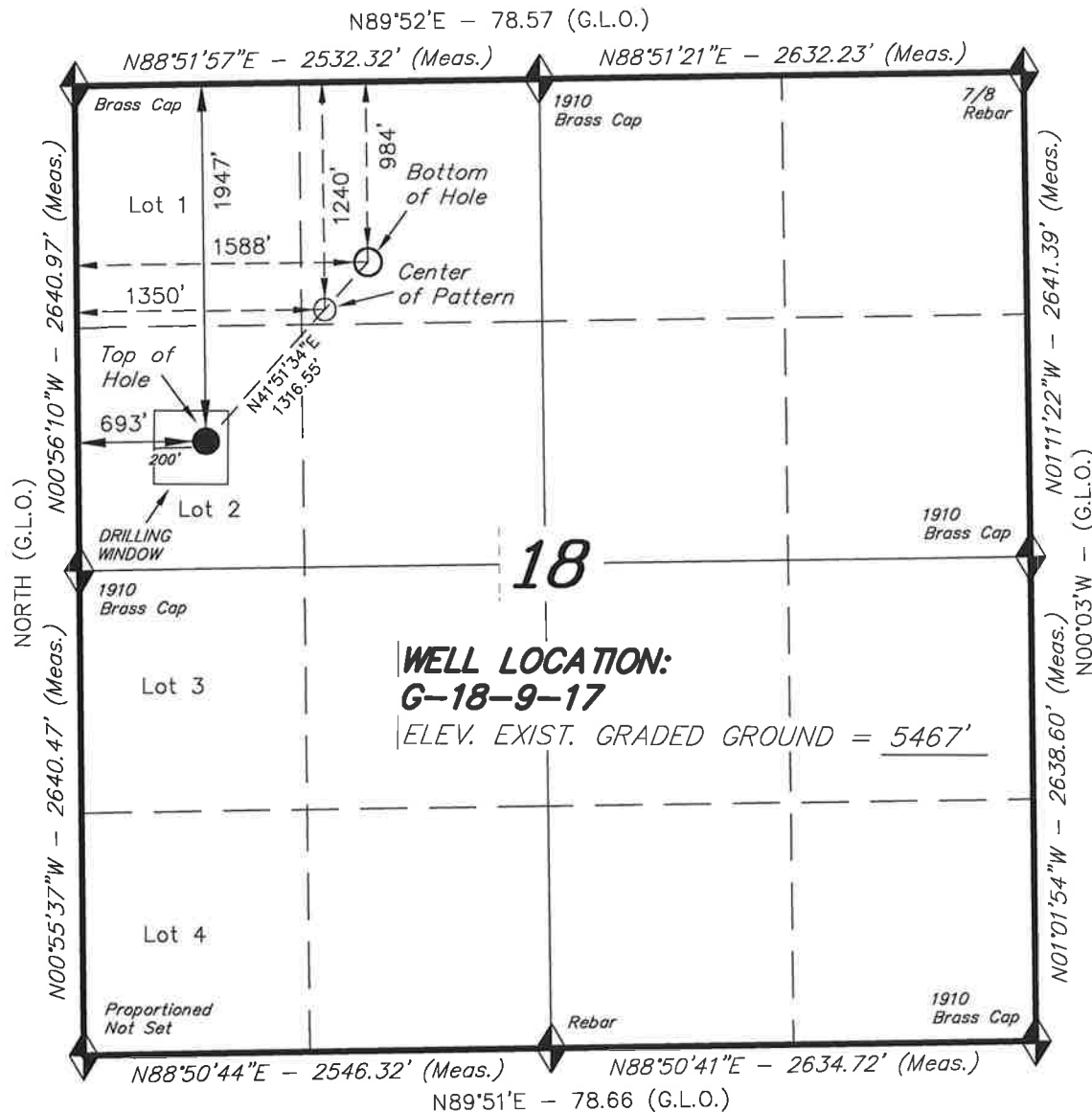
The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +/- . A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the first quarter of 2011, and take approximately seven (7) days from spud to rig release.

**T9S, R17E, S.L.B.&M.**

**WELL LOCATION:**  
**G-18-9-17**

ELEV. EXIST. GRADED GROUND = 5467'

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on  
LOCATION: an N.G.S. OPUS Correction.  
LAT. 40°04'09.56" LONG. 110°00'43.28"  
(Tristate Aluminum Cap) Elev. 5281.57'

**G-18-9-17**  
**(Surface Location) NAD 83**  
LATITUDE = 40° 01' 57.77"  
LONGITUDE = 110° 03' 21.32"

**NEWFIELD EXPLORATION COMPANY**

WELL LOCATION, G-18-9-17, LOCATED  
AS SHOWN IN THE SW 1/4 NW 1/4  
(LOT 2) OF SECTION 18, T9S, R17E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, G-18-9-17,  
LOCATED AS SHOWN IN THE NE 1/4 NW  
1/4 OF SECTION 18, T9S, R17E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.

**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

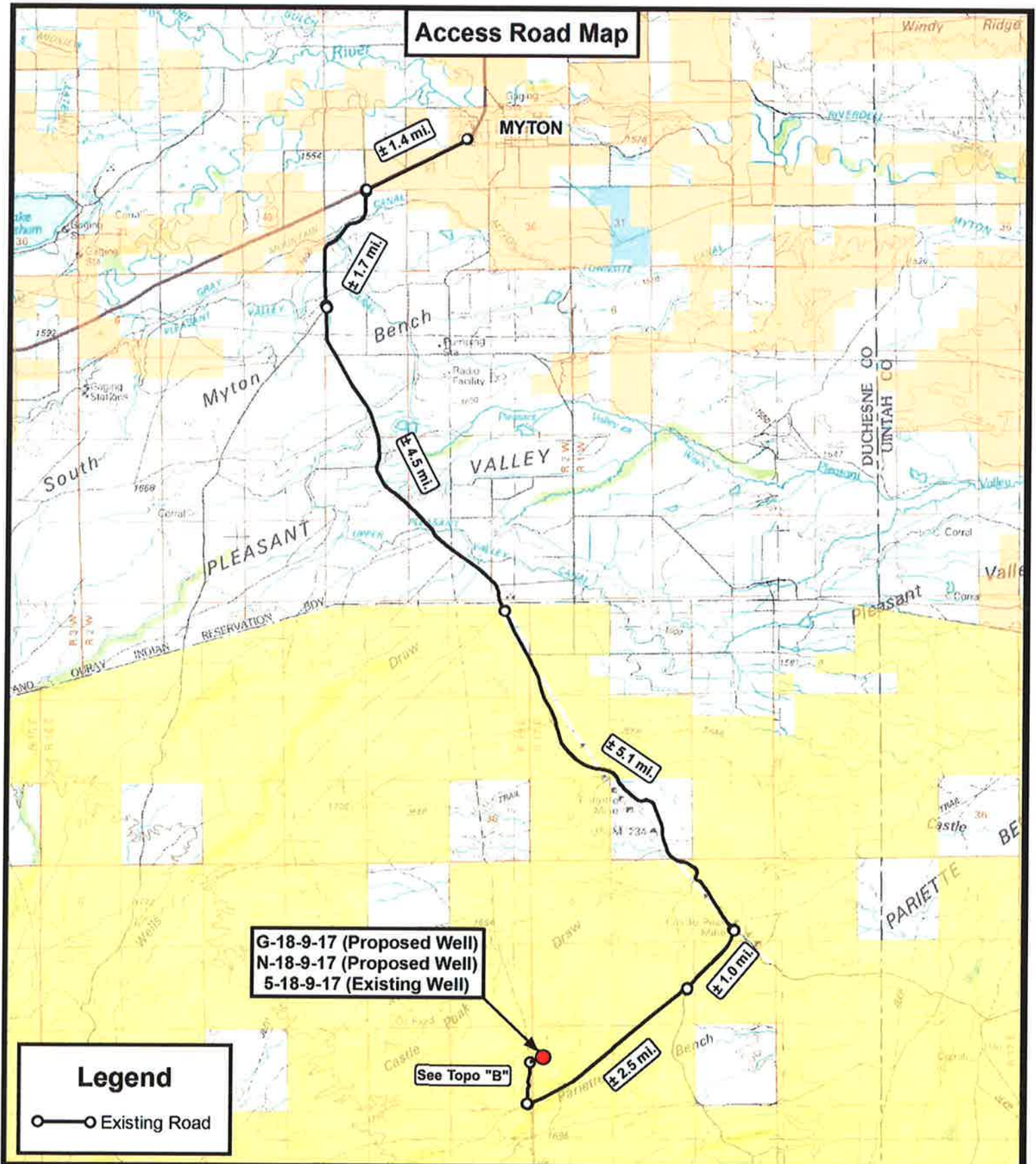
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST  
OF MY KNOWLEDGE AND BELIEF.

Stacy W. Stewart  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 08-11-10	SURVEYED BY: D.G.
DATE DRAWN: 09-10-10	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'



**Tri State**  
**Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
 F: (435) 781-2518



DRAWN BY: C.H.M.  
 DATE: 09-01-2010  
 SCALE: 1:100,000

### NEWFIELD EXPLORATION COMPANY

G-18-9-17 (Proposed Well)  
 N-18-9-17 (Proposed Well)  
 5-18-9-17 (Existing Well)  
 SEC. 18, T9S, R17E, S.L.B.&M. Duchesne County, UT.

**TOPOGRAPHIC MAP**

SHEET

**A**



# Access Road Map

G-18-9-17 (Proposed Well)  
N-18-9-17 (Proposed Well)  
5-18-9-17 (Existing Well)

± 0.1 mi.

± 0.5 mi.

Mytong ± 16.2 mi.

P A R I E T T E

## Legend

Existing Road



**Tri State**  
**Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518

N



## NEWFIELD EXPLORATION COMPANY

G-18-9-17 (Proposed Well)  
N-18-9-17 (Proposed Well)  
5-18-9-17 (Existing Well)

SEC. 18, T9S, R17E, S.L.B.&M. Duchesne County, UT.

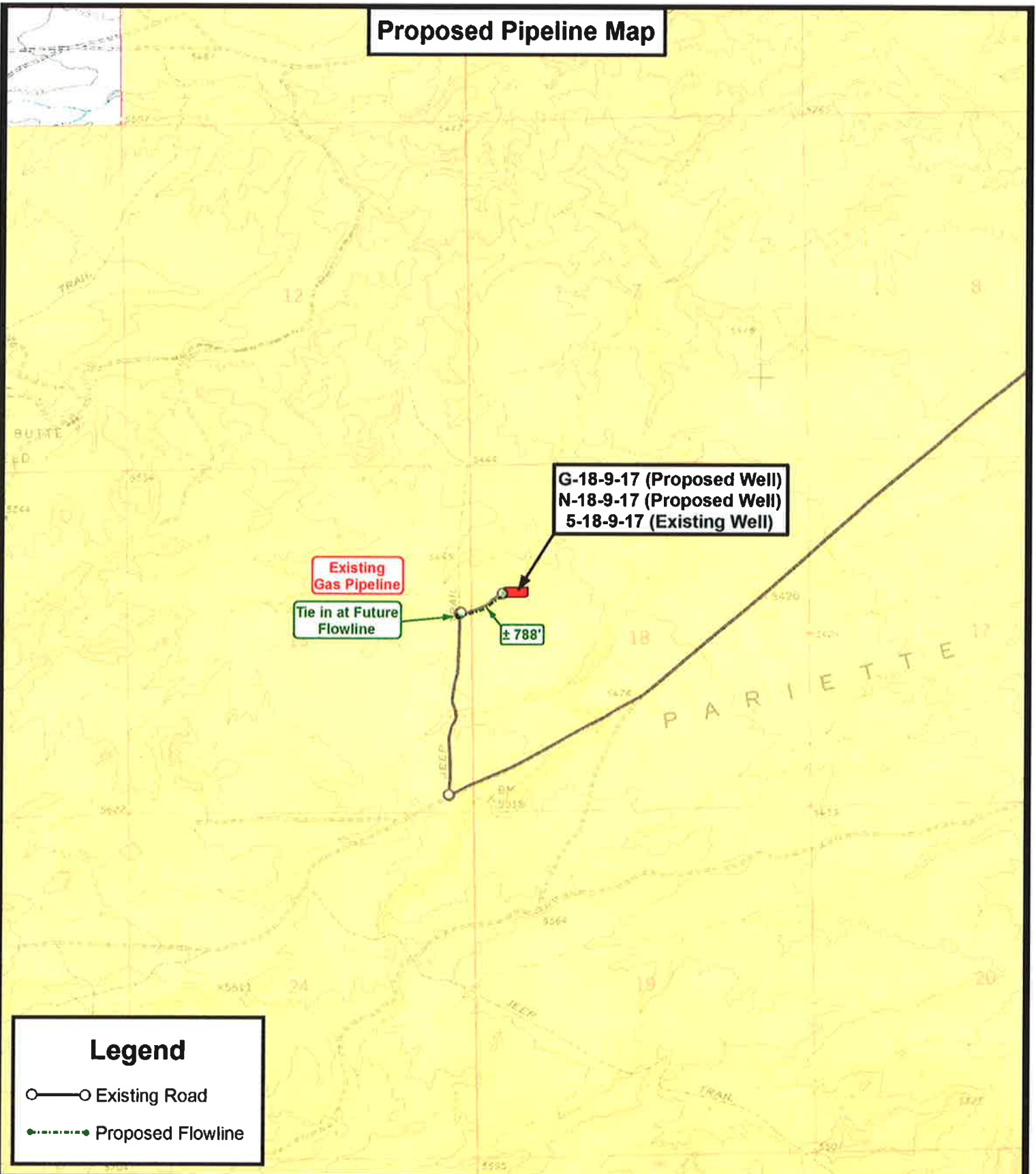
DRAWN BY: C.H.M.  
DATE: 09-01-2010  
SCALE: 1" = 2,000'

**TOPOGRAPHIC MAP**

SHEET

**B**

# Proposed Pipeline Map



## Legend

- Existing Road
- Proposed Flowline



**Tri State  
Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

G-18-9-17 (Proposed Well)  
N-18-9-17 (Proposed Well)  
5-18-9-17 (Existing Well)

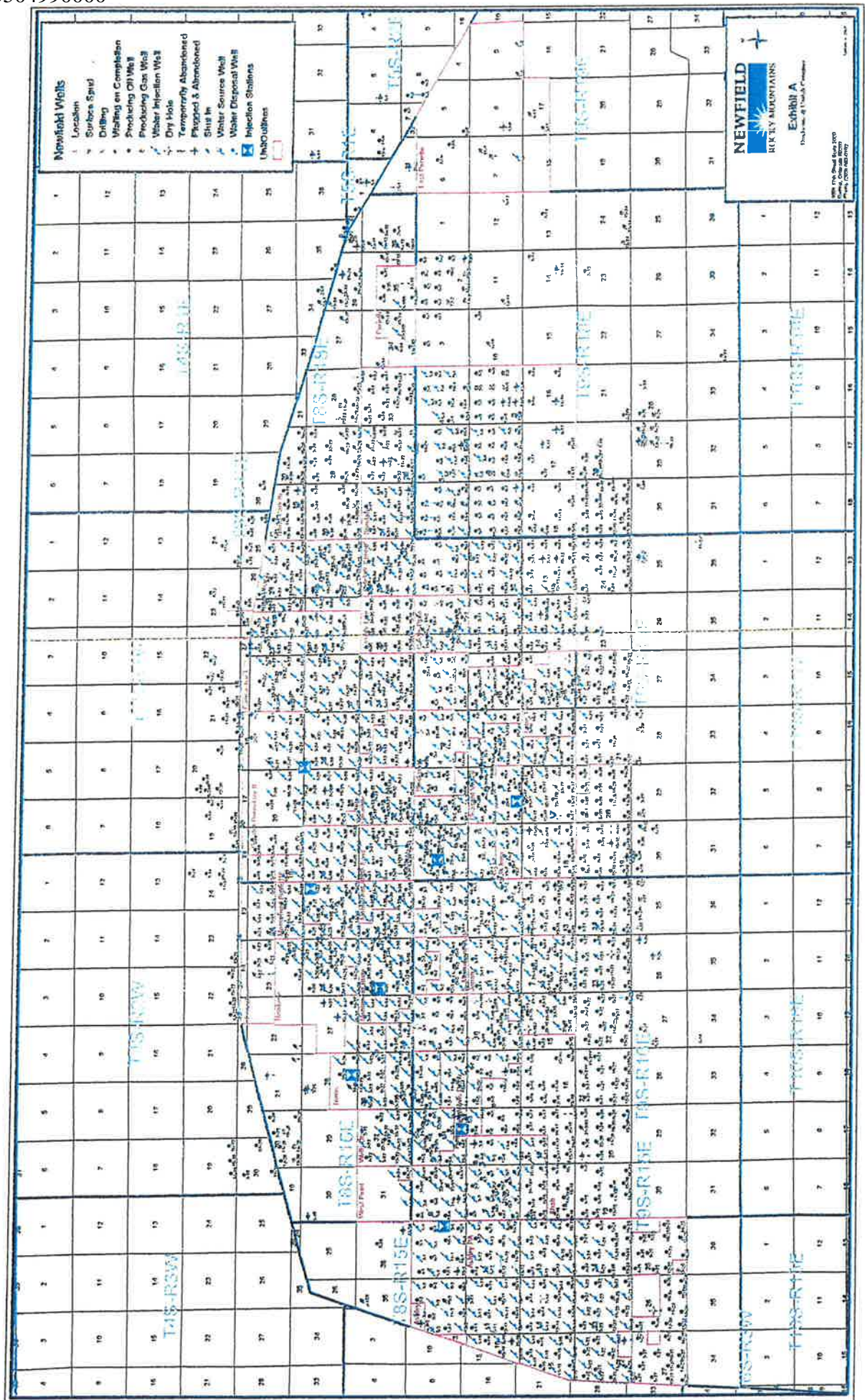
SEC. 18, T9S, R17E, S.L.B.&M. Duchesne County, UT.

DRAWN BY: C.H.M.  
DATE: 09-01-2010  
SCALE: 1" = 2,000'

**TOPOGRAPHIC MAP**

SHEET  
**C**

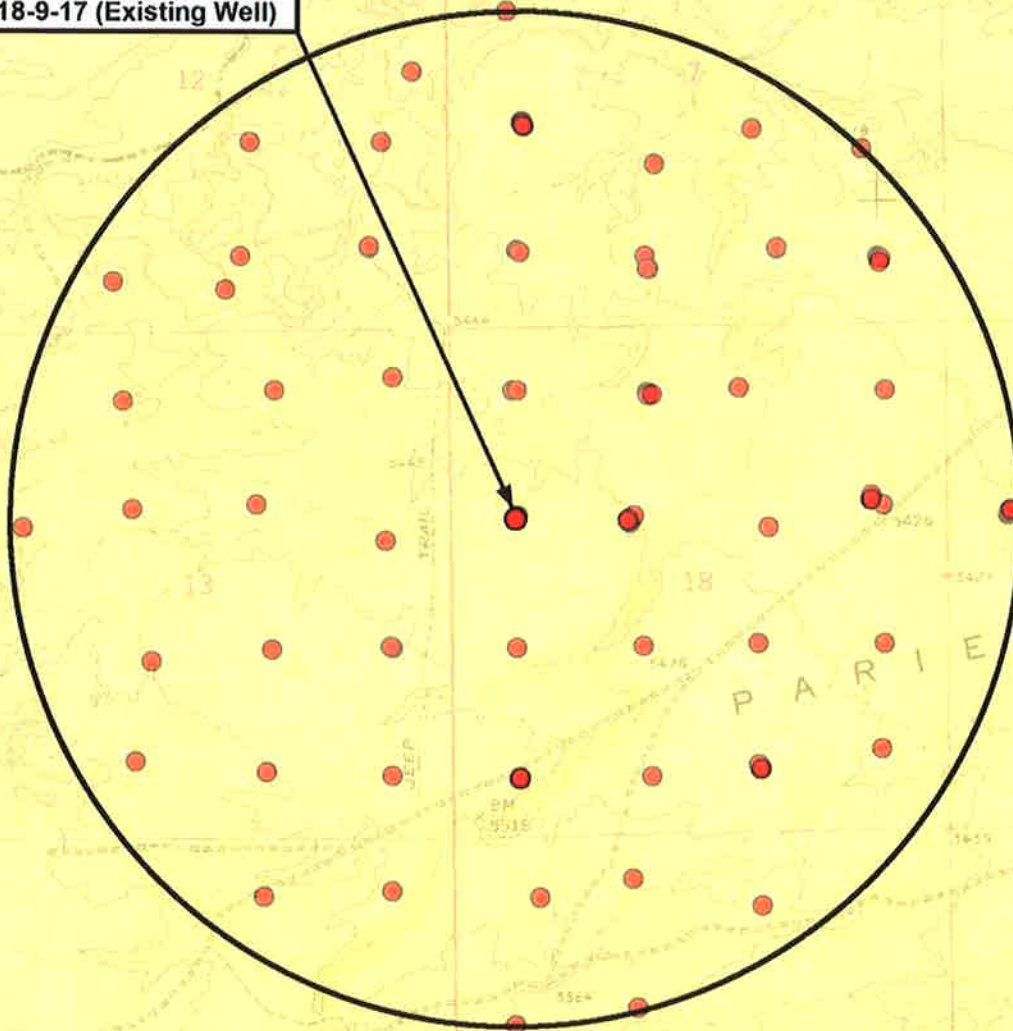







**Exhibit "B" Map**

**G-18-9-17 (Proposed Well)**  
**N-18-9-17 (Proposed Well)**  
**5-18-9-17 (Existing Well)**



**Legend**

-  1 Mile Radius
-  Pad Location



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**NEWFIELD EXPLORATION COMPANY**

**G-18-9-17 (Proposed Well)**  
**N-18-9-17 (Proposed Well)**  
**5-18-9-17 (Existing Well)**  
**SEC. 18, T9S, R17E, S.L.B.&M. Duchesne County, UT.**

DRAWN BY: C.H.M.  
DATE: 09-01-2010  
SCALE: 1" = 2,000'

**TOPOGRAPHIC MAP**

SHEET  
**D**

**NEWFIELD**



## **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 18 T9S R17E  
G-18-9-17**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**07 September, 2010**

**HATHAWAY**<sup>HB</sup>**BURNHAM**  
DIRECTIONAL & MWD SERVICES

**HATHAWAY BURNHAM**

## Planning Report



**Database:** EDM 2003.21 Single User Db  
**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 18 T9S R17E  
**Well:** G-18-9-17  
**Wellbore:** Wellbore #1  
**Design:** Design #1

**Local Co-ordinate Reference:** Well G-18-9-17  
**TVD Reference:** G-18-9-17 @ 5480.0ft (Original Well Elev)  
**MD Reference:** G-18-9-17 @ 5480.0ft (Original Well Elev)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

<b>Project</b>	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	SECTION 18 T9S R17E			
<b>Site Position:</b>		<b>Northing:</b>	7,183,900.00 ft	<b>Latitude:</b> 40° 1' 56.921 N
<b>From:</b> Map		<b>Easting:</b>	2,049,800.00 ft	<b>Longitude:</b> 110° 2' 16.332 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b> 0.94 °

<b>Well</b>	G-18-9-17, SHL LAT: 40° 01' 57.92, LONG: -110° 03' 21.12			
<b>Well Position</b>	<b>+N/-S</b> 19.2 ft	<b>Northing:</b>	7,183,919.21 ft	<b>Latitude:</b> 40° 1' 57.920 N
	<b>+E/-W</b> -5,040.1 ft	<b>Easting:</b>	2,044,759.94 ft	<b>Longitude:</b> 110° 3' 21.120 W
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	5,480.0 ft	<b>Ground Level:</b> 5,468.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2010/09/07	11.41	65.81	52,341

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	41.86

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,603.5	15.05	41.86	1,592.0	97.6	87.5	1.50	1.50	0.00	41.86	
4,821.9	15.05	41.86	4,700.0	720.2	645.3	0.00	0.00	0.00	0.00	G-18-9-17 TGT
6,168.1	15.05	41.86	6,000.0	980.5	878.6	0.00	0.00	0.00	0.00	

NEWFIELD



## HATHAWAY BURNHAM

Planning Report



**Database:** EDM 2003.21 Single User Db  
**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 18 T9S R17E  
**Well:** G-18-9-17  
**Wellbore:** Wellbore #1  
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**Local Co-ordinate Reference:** Well G-18-9-17  
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**MD Reference:** G-18-9-17 @ 5480.0ft (Original Well Elev)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	41.86	700.0	1.0	0.9	1.3	1.50	1.50	0.00
800.0	3.00	41.86	799.9	3.9	3.5	5.2	1.50	1.50	0.00
900.0	4.50	41.86	899.7	8.8	7.9	11.8	1.50	1.50	0.00
1,000.0	6.00	41.86	999.3	15.6	14.0	20.9	1.50	1.50	0.00
1,100.0	7.50	41.86	1,098.6	24.3	21.8	32.7	1.50	1.50	0.00
1,200.0	9.00	41.86	1,197.5	35.0	31.4	47.0	1.50	1.50	0.00
1,300.0	10.50	41.86	1,296.1	47.6	42.7	64.0	1.50	1.50	0.00
1,400.0	12.00	41.86	1,394.2	62.2	55.7	83.5	1.50	1.50	0.00
1,500.0	13.50	41.86	1,491.7	78.6	70.4	105.5	1.50	1.50	0.00
1,603.5	15.05	41.86	1,592.0	97.6	87.5	131.1	1.50	1.50	0.00
1,700.0	15.05	41.86	1,685.2	116.3	104.2	156.1	0.00	0.00	0.00
1,800.0	15.05	41.86	1,781.8	135.6	121.5	182.1	0.00	0.00	0.00
1,900.0	15.05	41.86	1,878.3	155.0	138.8	208.1	0.00	0.00	0.00
2,000.0	15.05	41.86	1,974.9	174.3	156.2	234.0	0.00	0.00	0.00
2,100.0	15.05	41.86	2,071.5	193.6	173.5	260.0	0.00	0.00	0.00
2,200.0	15.05	41.86	2,168.0	213.0	190.8	286.0	0.00	0.00	0.00
2,300.0	15.05	41.86	2,264.6	232.3	208.2	312.0	0.00	0.00	0.00
2,400.0	15.05	41.86	2,361.2	251.7	225.5	337.9	0.00	0.00	0.00
2,500.0	15.05	41.86	2,457.7	271.0	242.8	363.9	0.00	0.00	0.00
2,600.0	15.05	41.86	2,554.3	290.4	260.2	389.9	0.00	0.00	0.00
2,700.0	15.05	41.86	2,650.9	309.7	277.5	415.8	0.00	0.00	0.00
2,800.0	15.05	41.86	2,747.4	329.1	294.8	441.8	0.00	0.00	0.00
2,900.0	15.05	41.86	2,844.0	348.4	312.2	467.8	0.00	0.00	0.00
3,000.0	15.05	41.86	2,940.6	367.7	329.5	493.8	0.00	0.00	0.00
3,100.0	15.05	41.86	3,037.1	387.1	346.8	519.7	0.00	0.00	0.00
3,200.0	15.05	41.86	3,133.7	406.4	364.2	545.7	0.00	0.00	0.00
3,300.0	15.05	41.86	3,230.3	425.8	381.5	571.7	0.00	0.00	0.00
3,400.0	15.05	41.86	3,326.8	445.1	398.8	597.6	0.00	0.00	0.00
3,500.0	15.05	41.86	3,423.4	464.5	416.1	623.6	0.00	0.00	0.00
3,600.0	15.05	41.86	3,520.0	483.8	433.5	649.6	0.00	0.00	0.00
3,700.0	15.05	41.86	3,616.6	503.1	450.8	675.6	0.00	0.00	0.00
3,800.0	15.05	41.86	3,713.1	522.5	468.1	701.5	0.00	0.00	0.00
3,900.0	15.05	41.86	3,809.7	541.8	485.5	727.5	0.00	0.00	0.00
4,000.0	15.05	41.86	3,906.3	561.2	502.8	753.5	0.00	0.00	0.00
4,100.0	15.05	41.86	4,002.8	580.5	520.1	779.4	0.00	0.00	0.00
4,200.0	15.05	41.86	4,099.4	599.9	537.5	805.4	0.00	0.00	0.00
4,300.0	15.05	41.86	4,196.0	619.2	554.8	831.4	0.00	0.00	0.00
4,400.0	15.05	41.86	4,292.5	638.5	572.1	857.4	0.00	0.00	0.00
4,500.0	15.05	41.86	4,389.1	657.9	589.5	883.3	0.00	0.00	0.00
4,600.0	15.05	41.86	4,485.7	677.2	606.8	909.3	0.00	0.00	0.00
4,700.0	15.05	41.86	4,582.2	696.6	624.1	935.3	0.00	0.00	0.00
4,800.0	15.05	41.86	4,678.8	715.9	641.4	961.2	0.00	0.00	0.00
4,821.9	15.05	41.86	4,700.0	720.2	645.3	966.9	0.00	0.00	0.00
<b>G-18-9-17 TGT</b>									
4,900.0	15.05	41.86	4,775.4	735.3	658.8	987.2	0.00	0.00	0.00
5,000.0	15.05	41.86	4,871.9	754.6	676.1	1,013.2	0.00	0.00	0.00
5,100.0	15.05	41.86	4,968.5	773.9	693.4	1,039.2	0.00	0.00	0.00





# HATHAWAY BURNHAM

## Planning Report



**Database:** EDM 2003.21 Single User Db  
**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 18 T9S R17E  
**Well:** G-18-9-17  
**Wellbore:** Wellbore #1  
**Design:** Design #1

**Local Co-ordinate Reference:** Well G-18-9-17  
**TVD Reference:** G-18-9-17 @ 5480.0ft (Original Well Elev)  
**MD Reference:** G-18-9-17 @ 5480.0ft (Original Well Elev)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.0	15.05	41.86	5,065.1	793.3	710.8	1,065.1	0.00	0.00	0.00
5,300.0	15.05	41.86	5,161.7	812.6	728.1	1,091.1	0.00	0.00	0.00
5,400.0	15.05	41.86	5,258.2	832.0	745.4	1,117.1	0.00	0.00	0.00
5,500.0	15.05	41.86	5,354.8	851.3	762.8	1,143.0	0.00	0.00	0.00
5,600.0	15.05	41.86	5,451.4	870.7	780.1	1,169.0	0.00	0.00	0.00
5,700.0	15.05	41.86	5,547.9	890.0	797.4	1,195.0	0.00	0.00	0.00
5,800.0	15.05	41.86	5,644.5	909.3	814.8	1,221.0	0.00	0.00	0.00
5,900.0	15.05	41.86	5,741.1	928.7	832.1	1,246.9	0.00	0.00	0.00
6,000.0	15.05	41.86	5,837.6	948.0	849.4	1,272.9	0.00	0.00	0.00
6,100.0	15.05	41.86	5,934.2	967.4	866.8	1,298.9	0.00	0.00	0.00
6,168.1	15.05	41.86	6,000.0	980.5	878.6	1,316.6	0.00	0.00	0.00

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
G-18-9-17 TGT	0.00	0.00	4,700.0	720.2	645.3	7,184,639.36	2,045,405.19	40° 2' 4.933 N	110° 3' 12.675 W
- plan hits target									
- Circle (radius 75.0)									



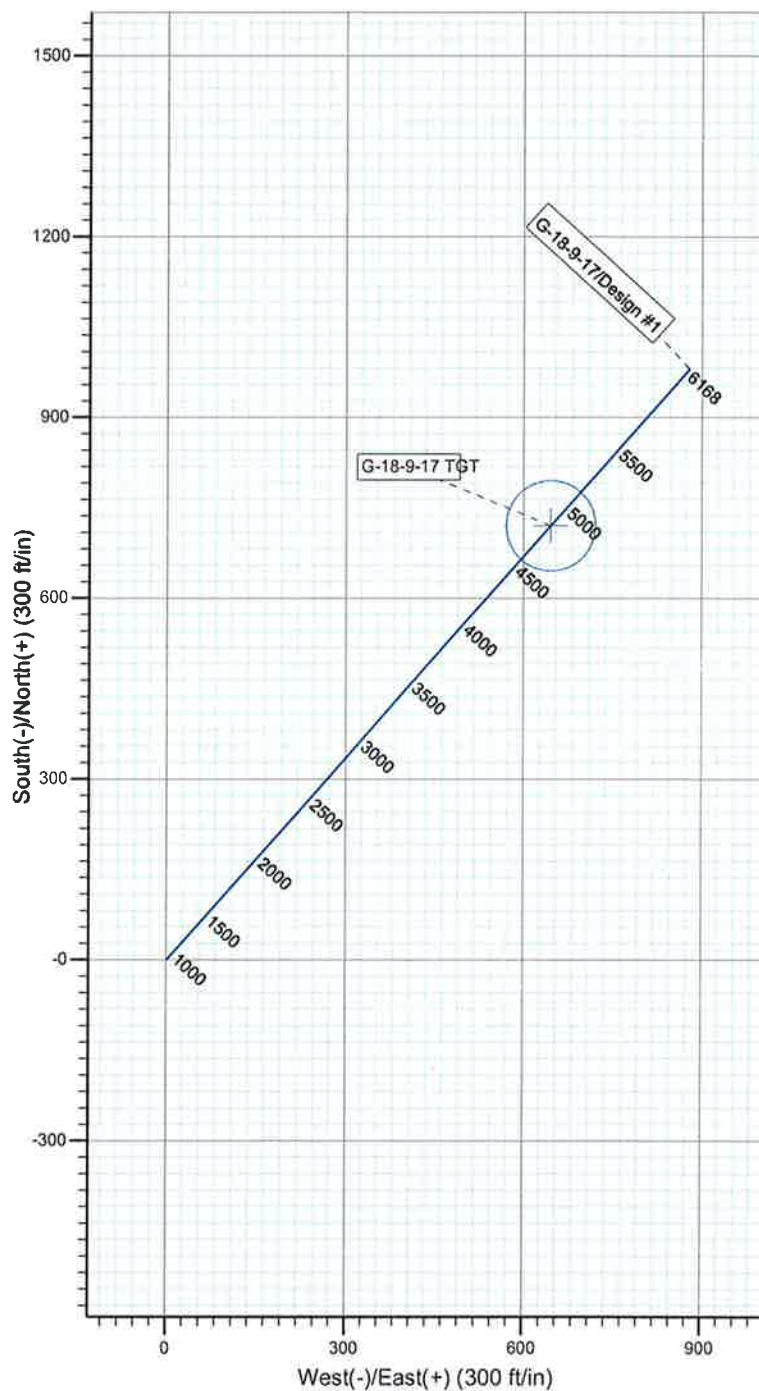
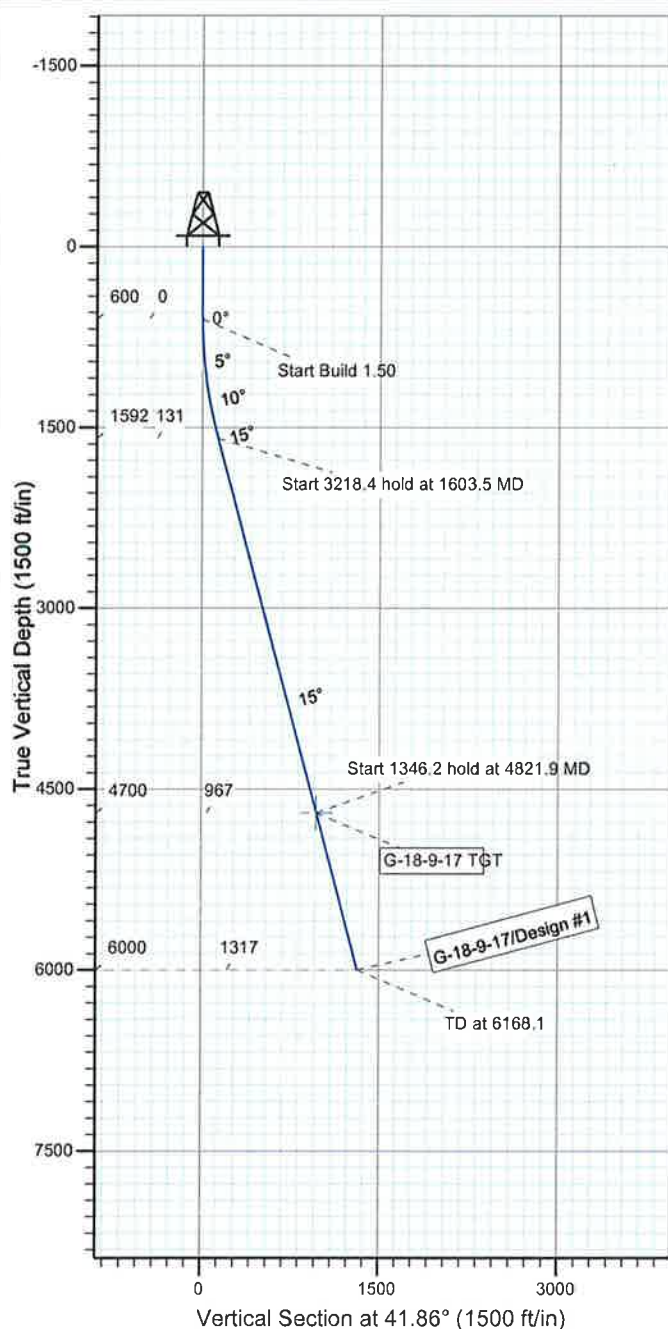
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: G-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.92°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52341.1snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
G-18-9-17 TGT	4700.0	720.2	645.3	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1603.5	15.05	41.86	1592.0	97.6	87.5	1.50	41.86	131.1	
4	4821.9	15.05	41.86	4700.0	720.2	645.3	0.00	0.00	966.9	G-18-9-17 TGT
5	6168.1	15.05	41.86	6000.0	980.5	878.6	0.00	0.00	1316.6	



**NEWFIELD PRODUCTION COMPANY  
GREATER MONUMENT BUTTE G-18-9-17  
AT SURFACE: (LOT #2) SW/NW SECTION 18, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Monument Butte G-18-9-17 located in the SW 1/4 NW 1/4 Section 18, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 – 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly – 11.3 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly - 3.5 miles  $\pm$  to it's junction with an existing road to the north; proceed northerly – 0.5 miles  $\pm$  to it's junction with an existing road to the northeast; proceed northeasterly – 0.1 miles  $\pm$  to the existing 5-18-9-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

**2. PLANNED ACCESS ROAD**

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 5-18-9-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District  
Water Right : 43-10136

Maurice Harvey Pond  
Water Right: 47-1358

Neil Moon Pond  
Water Right: 43-11787

Newfield Collector Well  
Water Right: 41-1817 (A30414DVA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.



8. **ANCILLARY FACILITIES**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT**

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP** – Bureau of Land Management.

12. **OTHER ADDITIONAL INFORMATION**

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #10-216, 11/1/10. Paleontological Resource Survey prepared by, Wade E. Miller, 5/11/05. See attached report cover pages, Exhibit "D".

#### **Surface Flow Line**

Newfield requests 788' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "D"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

Clearing and Grading: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

Installation: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

Termination and Final Reclamation: After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### **Water Disposal**

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed Greater Monument Butte G-18-9-17 was on-sited on 10/6/10. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Janna Simonsen (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Greater Monument Butte G-18-9-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Greater Monument Butte G-18-9-

17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Representative

Name: Tim Eaton  
Address: Newfield Production Company  
Route 3, Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #G-18-9-17, Section 18, Township 9S, Range 17E: Lease UTU-72106 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

11/24/10  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

## 2-M SYSTEM

Blowout Prevention Equipment Systems

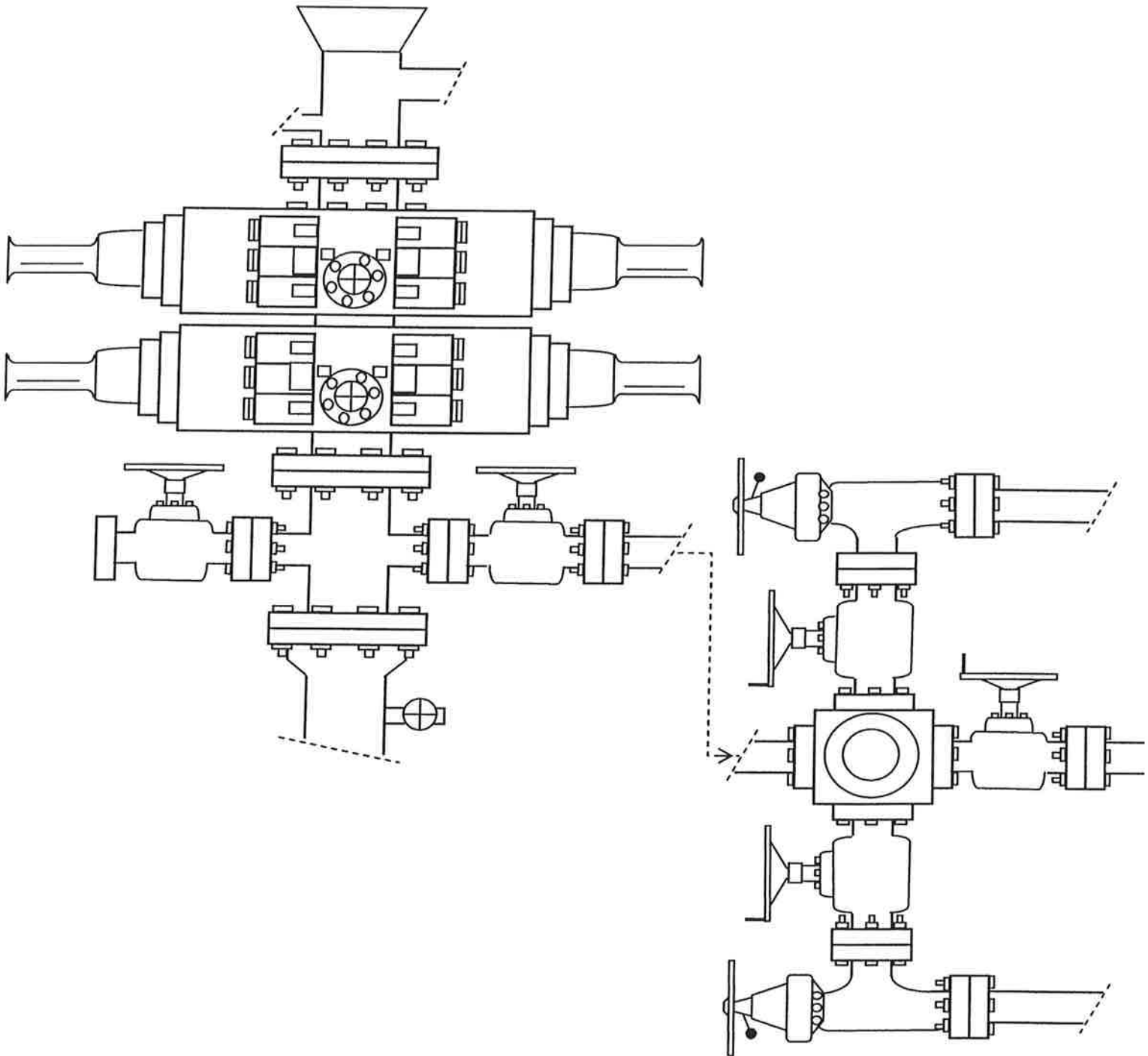


EXHIBIT C



November 29, 2010

State of Utah, Division of Oil, Gas and Mining  
ATTN: Diana Mason  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

RE: Directional Drilling  
**Greater Monument Butte G-18-9-17**  
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R17E Section 18: SWNW (Lot 2) (UTU-72106)  
1947' FNL 693' FWL

At Target: T9S-R17E Section 18: NENW (UTU-72106)  
984' FNL 1588' FWL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 11/24/10, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-existing roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at [sgillespie@newfield.com](mailto:sgillespie@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

  
Shane Gillespie  
Land Associate

Form 3160-3  
(August 2007)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

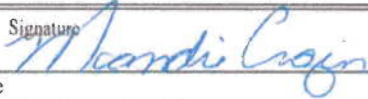
## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-72106
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name NA
2. Name of Operator Newfield Production Company		7. If Unit or CA Agreement, Name and No. Greater Monument Butte
3a. Address Route #3 Box 3630, Myton UT 84052		8. Lease Name and Well No. Greater Monument Butte G-18-9-17
3b. Phone No. (include area code) (435) 646-3721		9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface (LOT #2) SW/NW 1947' FNL 693' FWL Sec. 18, T9S R17E (UTU-72106) At proposed prod. zone NE/NW 984' FNL 1588' FWL Sec. 18, T9S R17E (UTU-72106)		10. Field and Pool, or Exploratory Monument Butte
14. Distance in miles and direction from nearest town or post office* Approximately 16.8 miles southeast of Myton, UT		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 18, T9S R17E
15. Distance from proposed* location to nearest property or lease line, ft. Approx. 1052' f/lease, NA' f/unit (Also to nearest drig. unit line, if any)	16. No. of acres in lease 1,188.92	12. County or Parish Duchesne
17. Spacing Unit dedicated to this well 20 Acres	13. State UT	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 764'	19. Proposed Depth 6,168'	20. BLM/BIA Bond No. on file WYB000493
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5467' GL	22. Approximate date work will start* 1st Qtr. 2011	23. Estimated duration (7) days from SPUD to rig release
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 11/24/10
Title Regulatory Specialist		

Approved by (Signature)	Name (Printed/Typed)	Date
	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

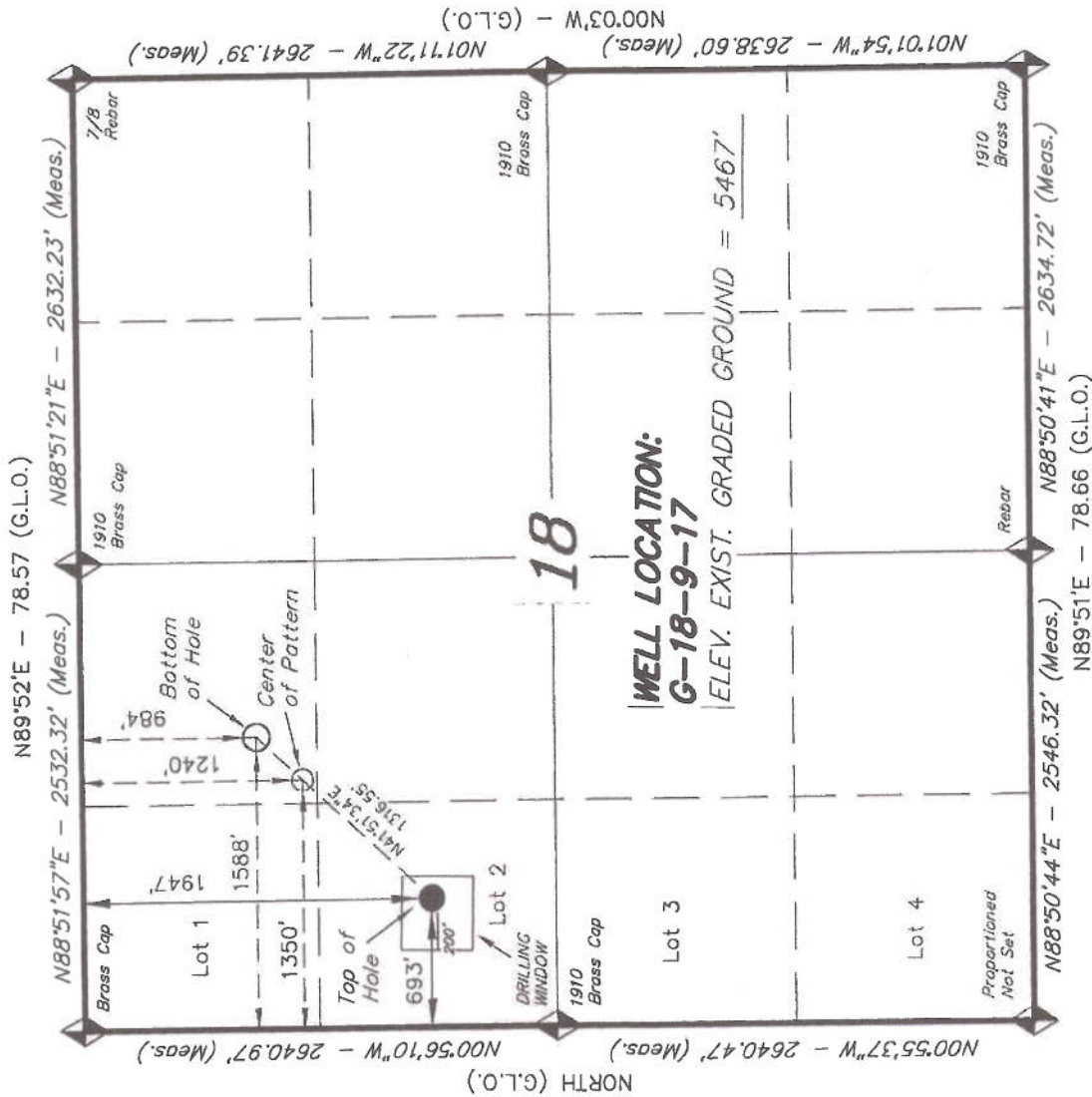
(Continued on page 2)

\*(Instructions on page 2)



# T9S, R17E, S.L.B.&M.

## NEWFIELD EXPLORATION COMPANY



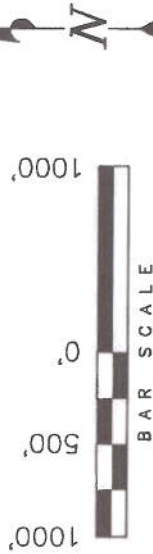
SECTION CORNERS LOCATED

BASIS OF ELEV.; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

G-18-9-17  
(Surface Location) NAD 83  
LATITUDE = 40° 01' 57.77"  
LONGITUDE = 110° 03' 21.32"

WELL LOCATION, G-18-9-17, LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 (LOT 2) OF SECTION 18, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, G-18-9-17, LOCATED AS SHOWN IN THE NE 1/4 NW 1/4 OF SECTION 18, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



NOTES:  
1. Well footages are measured at right angles to the Section Lines.  
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 189377  
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING  
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED:  
08-11-10  
SURVEYED BY: D.G.  
DATE DRAWN:  
09-10-10  
DRAWN BY: F.T.M.  
REVISED:  
SCALE: 1" = 1000'

# Access Road Map

G-18-9-17 (Proposed Well)  
N-18-9-17 (Proposed Well)  
5-18-9-17 (Existing Well)

± 0.5 mi.  
± 0.1 mi.

Mytong ± 16.2 mi.

P A R I E T T E

## Legend

○—○ Existing Road



**Tri State**  
**Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518

N



## NEWFIELD EXPLORATION COMPANY

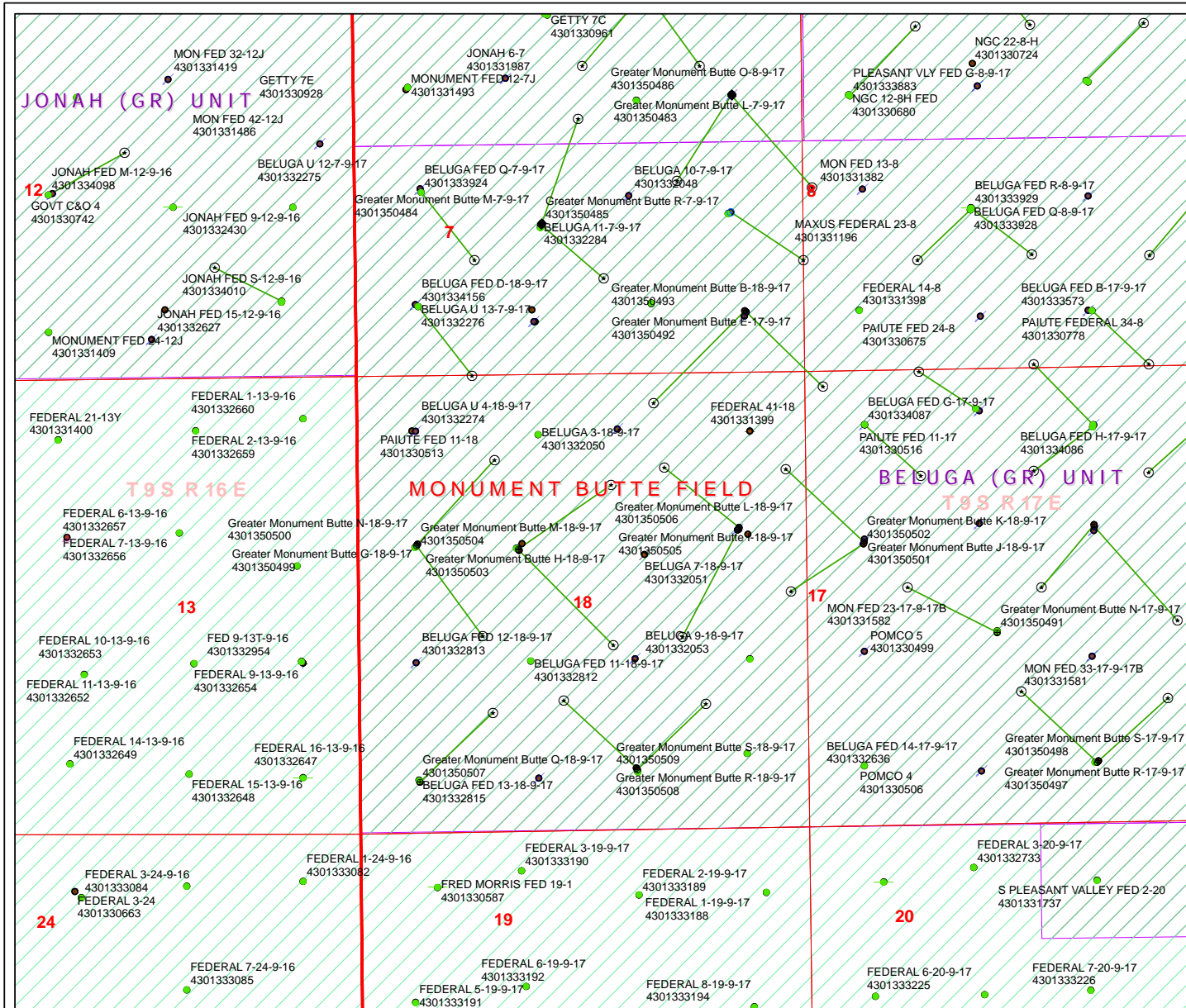
G-18-9-17 (Proposed Well)  
N-18-9-17 (Proposed Well)  
5-18-9-17 (Existing Well)  
SEC. 18, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP

SHEET  
**B**

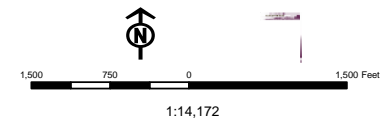
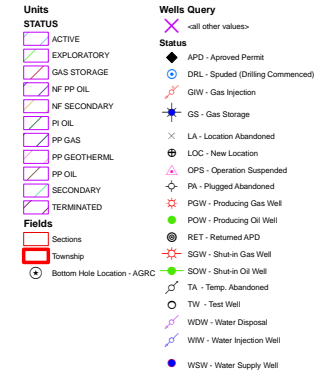
DRAWN BY:	C.H.M.
DATE:	09-01-2010
SCALE:	1" = 2,000'





**API Number: 4301350499**  
**Well Name: Greater Monument Butte G-18-9-17**  
**Township 09.0 S Range 17.0 E Section 18**  
**Meridian: SLBM**  
**Operator: NEWFIELD PRODUCTION COMPANY**

Map Prepared:  
 Map Produced by Diana Mason



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

**IN REPLY REFER TO:**

**3160**

**(UT-922)**

November 30, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Greater Monument  
Butte Unit, Duchesne and Uintah Counties,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-50491	GMBU N-17-9-17	Sec 17 T09S R17E 2204 FSL 2172 FWL BHL Sec 17 T09S R17E 2528 FNL 1145 FWL
43-013-50492	GMBU E-17-9-17	Sec 07 T09S R17E 0679 FSL 0676 FEL BHL Sec 17 T09S R17E 0200 FNL 0197 FWL
43-013-50493	GMBU B-18-9-17	Sec 07 T09S R17E 0690 FSL 0695 FEL BHL Sec 18 T09S R17E 0351 FNL 1758 FEL
43-013-50494	GMBU K-17-9-17	Sec 16 T09S R17E 1967 FSL 0652 FWL BHL Sec 17 T09S R17E 2402 FNL 0168 FEL
43-013-50495	GMBU L-17-9-17	Sec 17 T09S R17E 1856 FNL 1980 FEL BHL Sec 17 T09S R17E 2301 FSL 1028 FEL
43-013-50496	GMBU M-17-9-17	Sec 17 T09S R17E 1835 FNL 1981 FEL BHL Sec 17 T09S R17E 2553 FNL 2592 FEL
43-013-50497	GMBU R-17-9-17	Sec 17 T09S R17E 0684 FSL 1962 FEL BHL Sec 17 T09S R17E 1516 FSL 2447 FWL
43-013-50498	GMBU S-17-9-17	Sec 17 T09S R17E 0699 FSL 1947 FEL BHL Sec 17 T09S R17E 1412 FSL 1143 FEL

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-50499	GMBU G-18-9-17	Sec 18 T09S R17E 1947 FNL 0693 FWL BHL Sec 18 T09S R17E 0984 FNL 1588 FWL
43-013-50500	GMBU N-18-9-17	Sec 18 T09S R17E 1962 FNL 0678 FWL BHL Sec 18 T09S R17E 2263 FSL 1427 FWL
43-013-50501	GMBU J-18-9-17	Sec 17 T09S R17E 1999 FNL 0652 FWL BHL Sec 18 T09S R17E 1138 FNL 0241 FEL
43-013-50502	GMBU K-18-9-17	Sec 17 T09S R17E 2019 FNL 0644 FWL BHL Sec 18 T09S R17E 2549 FNL 0199 FEL
43-013-50503	GMBU H-18-9-17	Sec 18 T09S R17E 2018 FNL 1850 FWL BHL Sec 18 T09S R17E 1293 FNL 2256 FEL
43-013-50504	GMBU M-18-9-17	Sec 18 T09S R17E 2037 FNL 1861 FWL BHL Sec 18 T09S R17E 2130 FSL 2247 FEL
43-013-50505	GMBU I-18-9-17	Sec 18 T09S R17E 1808 FNL 0790 FEL BHL Sec 18 T09S R17E 1106 FNL 1638 FEL
43-013-50506	GMBU L-18-9-17	Sec 18 T09S R17E 1829 FNL 0792 FEL BHL Sec 18 T09S R17E 2213 FSL 1452 FEL
43-013-50507	GMBU Q-18-9-17	Sec 18 T09S R17E 0593 FSL 0689 FWL BHL Sec 18 T09S R17E 1377 FSL 1539 FWL
43-013-50508	GMBU R-18-9-17	Sec 18 T09S R17E 0709 FSL 1996 FEL BHL Sec 18 T09S R17E 1501 FSL 2355 FWL
43-013-50509	GMBU S-18-9-17	Sec 18 T09S R17E 0690 FSL 1987 FEL BHL Sec 18 T09S R17E 1433 FSL 1189 FEL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals,  
email=Michael\_Coulthard@blm.gov, c=US  
Date: 2010.11.30 09:30:01 -07'00'

bcc: File - Greater Monument Butte Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:11-30-10



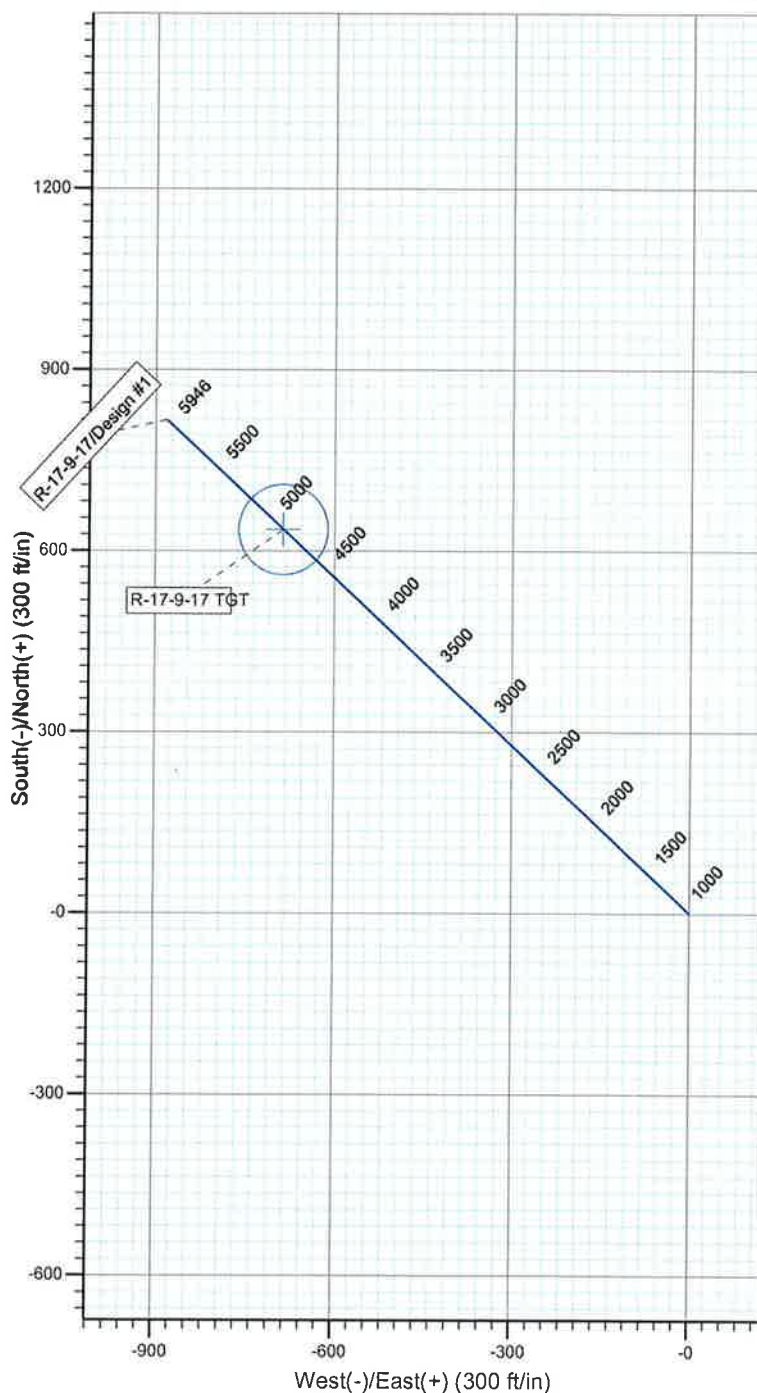
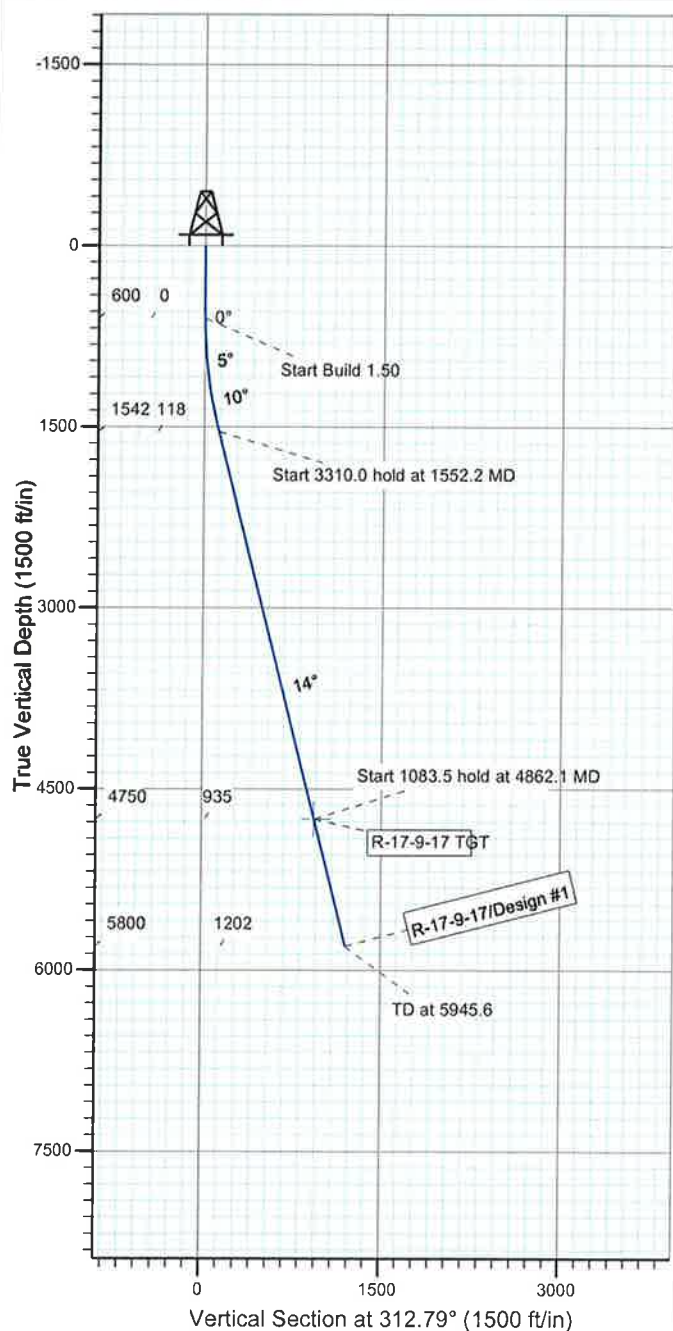
Project: USGS Myton SW (UT)  
 Site: SECTION 17 T9S, R17E  
 Well: R-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.39°

Magnetic Field  
 Strength: 52341.8snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLENG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
R-17-9-17 TGT	4750.0	634.9	-685.9	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1552.2	14.28	312.79	1542.4	80.2	-86.6	1.50	312.79	118.1	
4	4862.1	14.28	312.79	4750.0	634.9	-685.9	0.00	0.00	934.7	R-17-9-17 TGT
5	5945.6	14.28	312.79	5800.0	816.5	-882.1	0.00	0.00	1202.0	







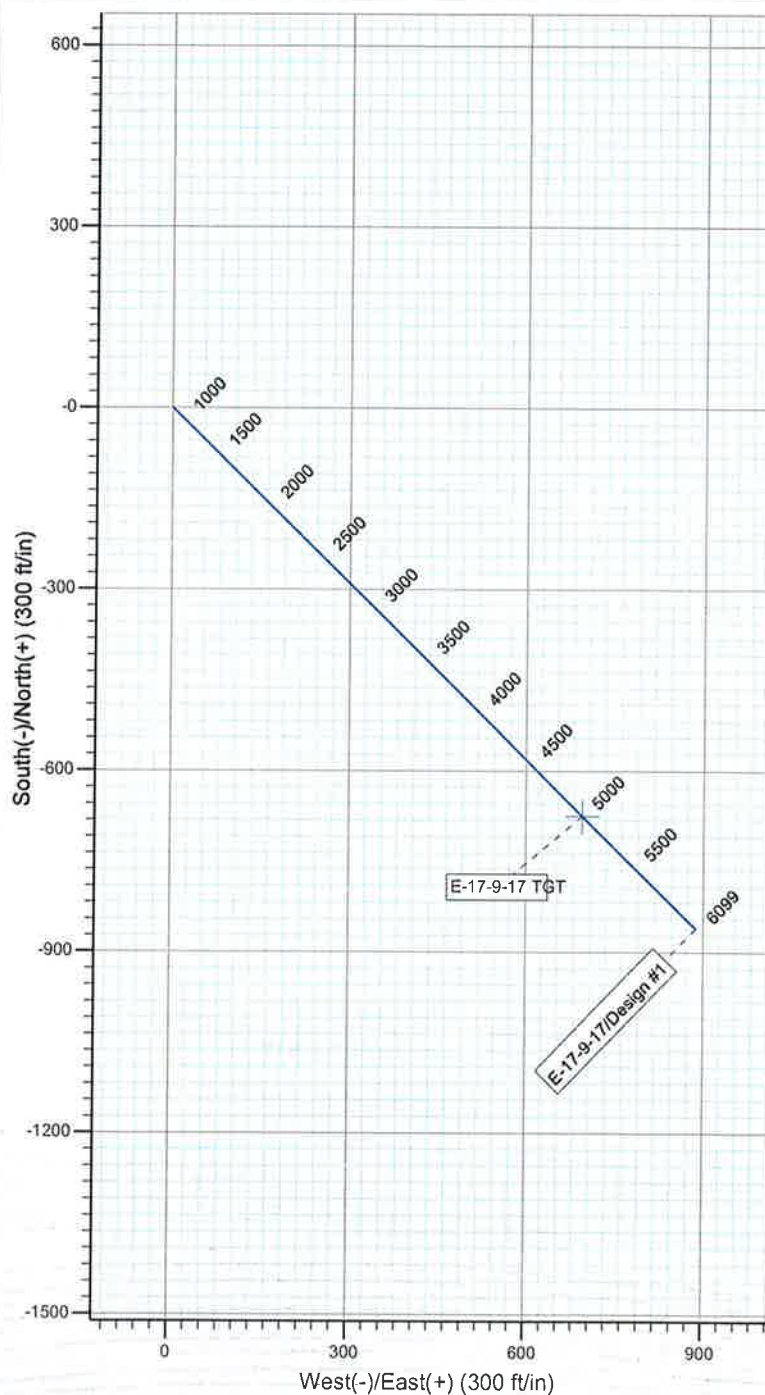
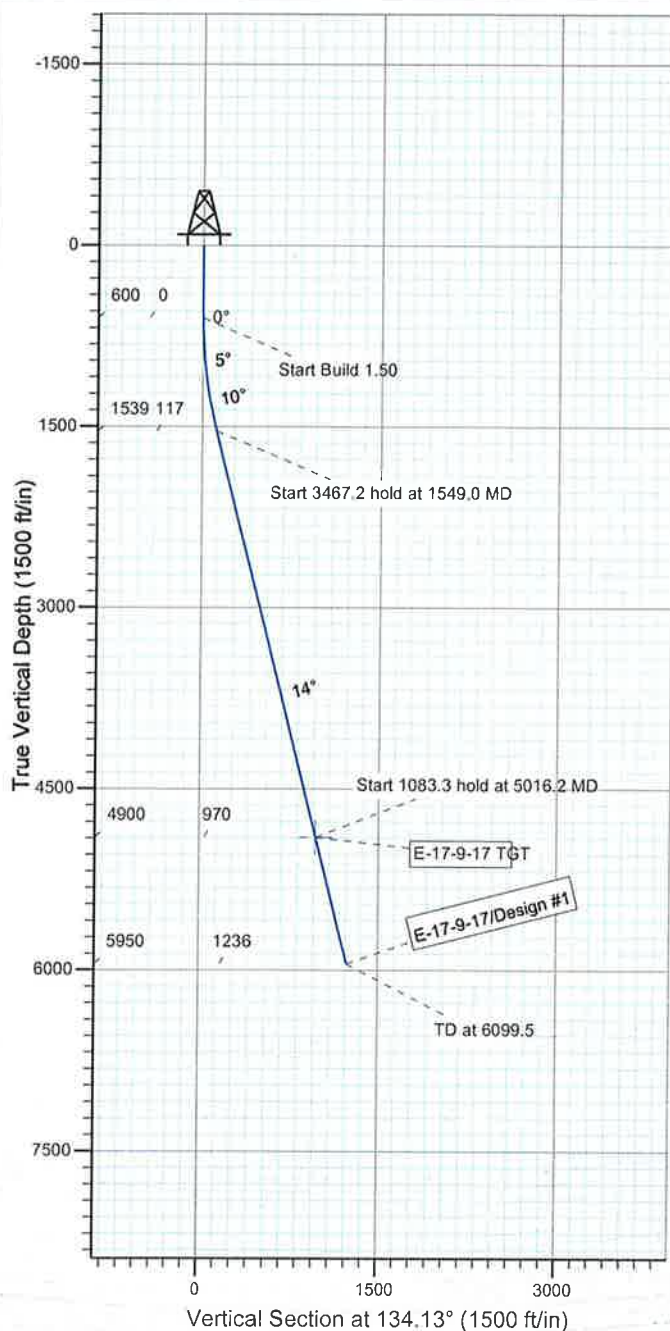
Project: USGS Myton SW (UT)  
 Site: SECTION 17 T9S, R17E  
 Well: E-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.40°

Magnetic Field  
 Strength: 52346.0snT  
 Dip Angle: 65.81°  
 Date: 2010/09/13  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
E-17-9-17 TGT	4900.0	-675.3	696.2	Point

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1549.0	14.24	134.13	1539.3	-81.7	84.2	1.50	134.13	117.3	
4	5016.2	14.24	134.13	4900.0	-675.3	696.2	0.00	0.00	969.9	E-17-9-17 TGT
5	6099.5	14.24	134.13	5950.0	-860.8	887.4	0.00	0.00	1236.3	



**NEWFIELD**

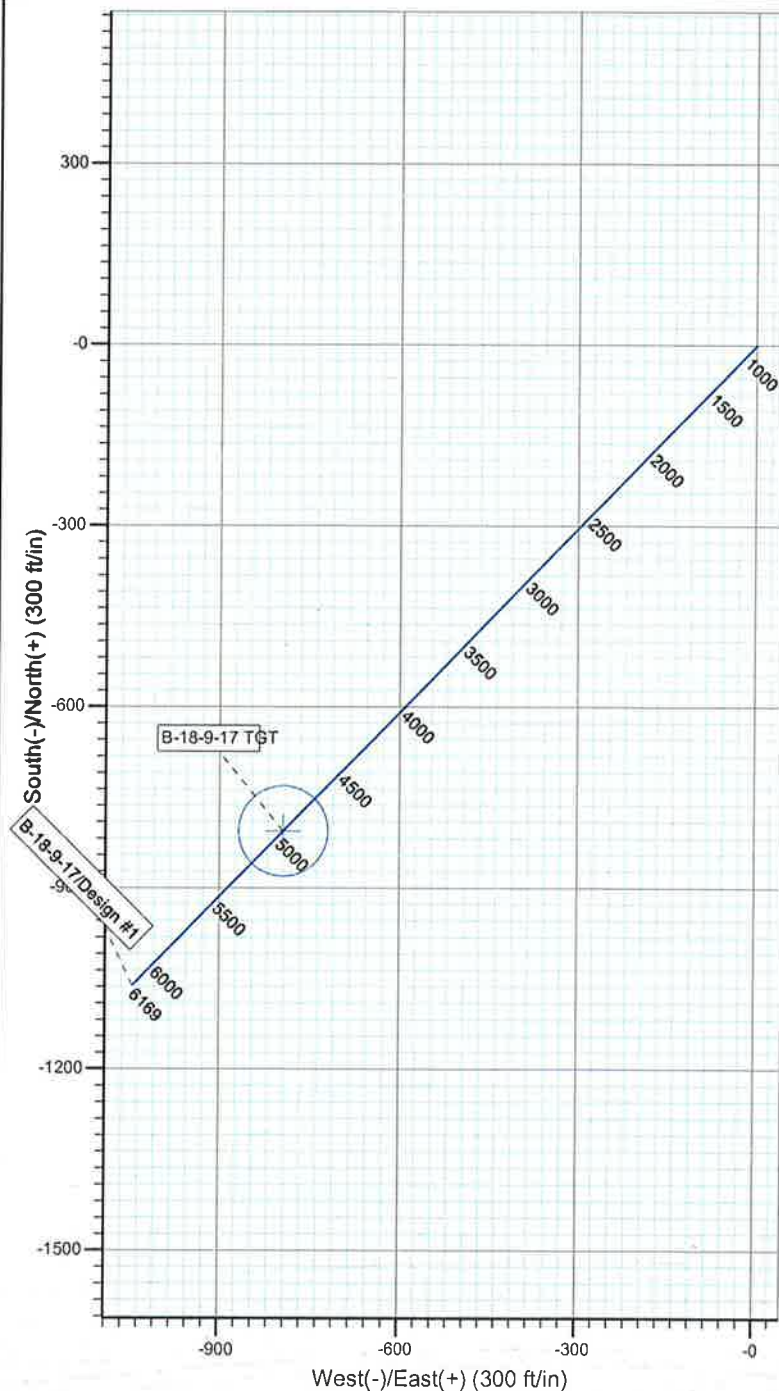
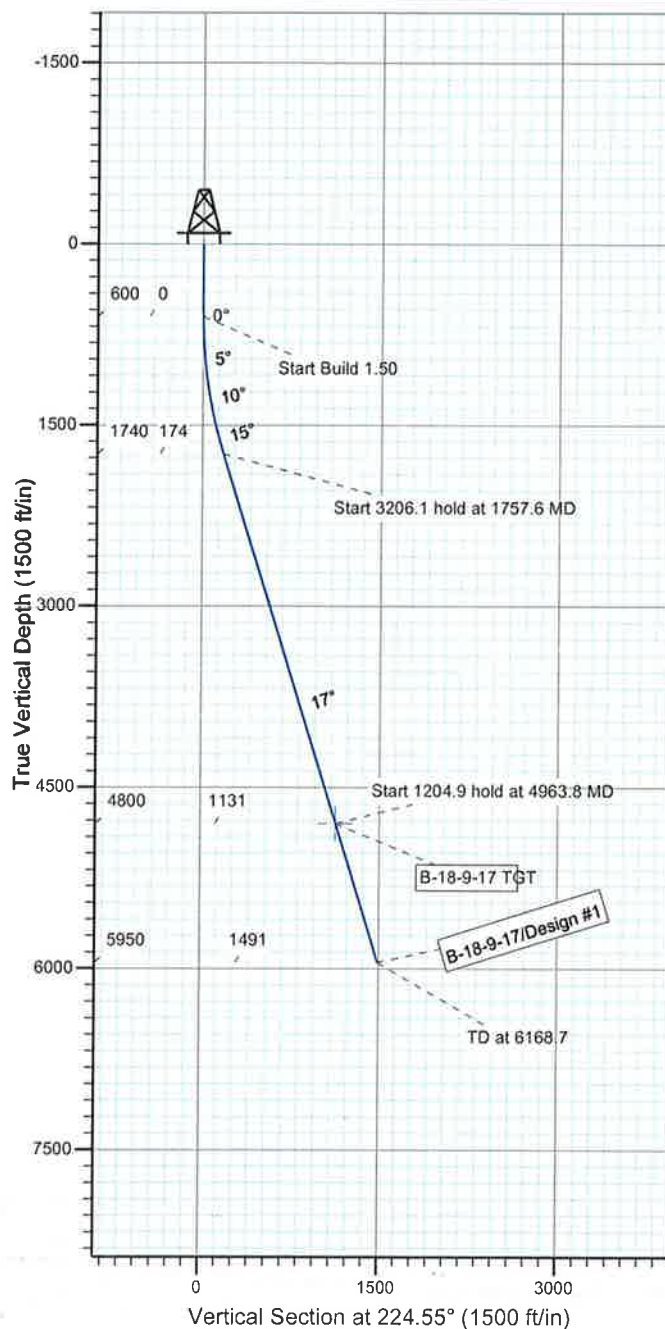
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: B-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.47°

Magnetic Field  
 Strength: 52346.0snT  
 Dip Angle: 65.81°  
 Date: 2010/09/13  
 Model: IGRF2010

KOP @ 600'  
 DOGLENG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'

**WELLBORE TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Shape
B-18-9-17 TGT	4800.0	-805.9	-793.4	Circle (Radius: 75.0)

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1757.6	17.36	224.55	1740.0	-124.1	-122.1	1.50	224.55	174.1	
4	4963.8	17.36	224.55	4800.0	-805.9	-793.4	0.00	0.00	1130.9	B-18-9-17 TGT
5	6168.7	17.36	224.55	5950.0	-1062.2	-1045.7	0.00	0.00	1490.5	

**HATHAWAY BURNHAM**  
 DIRECTIONAL & MWD SERVICES





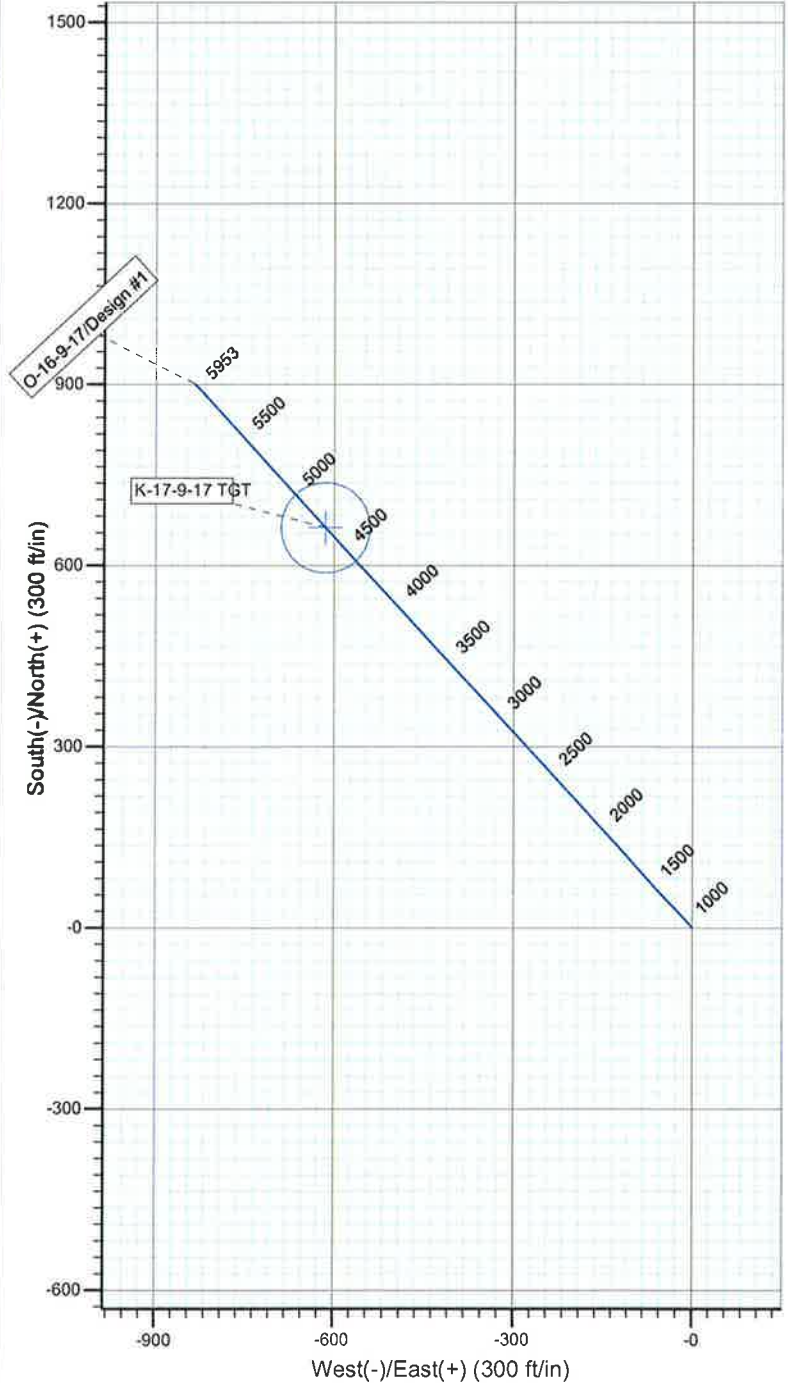
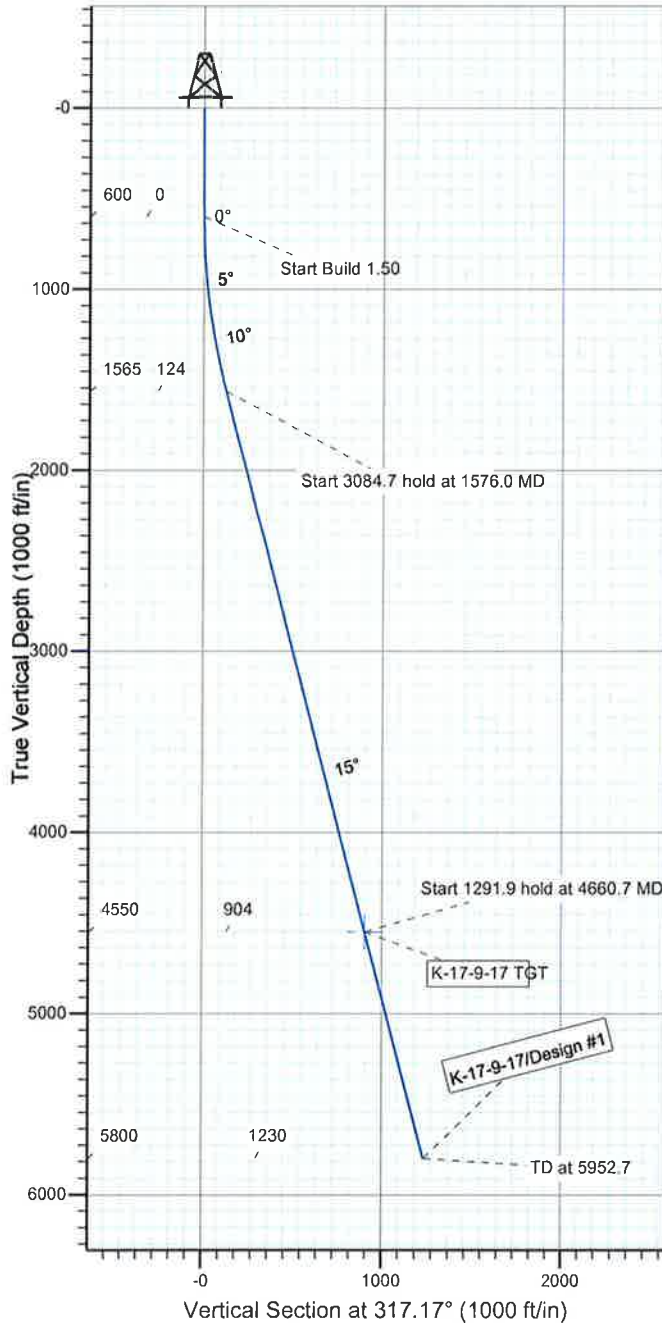
Project: USGS Myton SW (UT)  
 Site: SECTION 16 T9S, R17E  
 Well: K-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.37°

Magnetic Field  
 Strength: 52326.4snT  
 Dip Angle: 65.81°  
 Date: 2010/11/17  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
K-17-9-17 TGT	4550.0	662.7	-614.3	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1576.0	14.64	317.17	1565.4	91.0	-84.3	1.50	317.17	124.0	
4	4660.7	14.64	317.17	4550.0	662.7	-614.3	0.00	0.00	903.7	K-17-9-17 TGT
5	5952.7	14.64	317.17	5800.0	902.2	-836.3	0.00	0.00	1230.2	





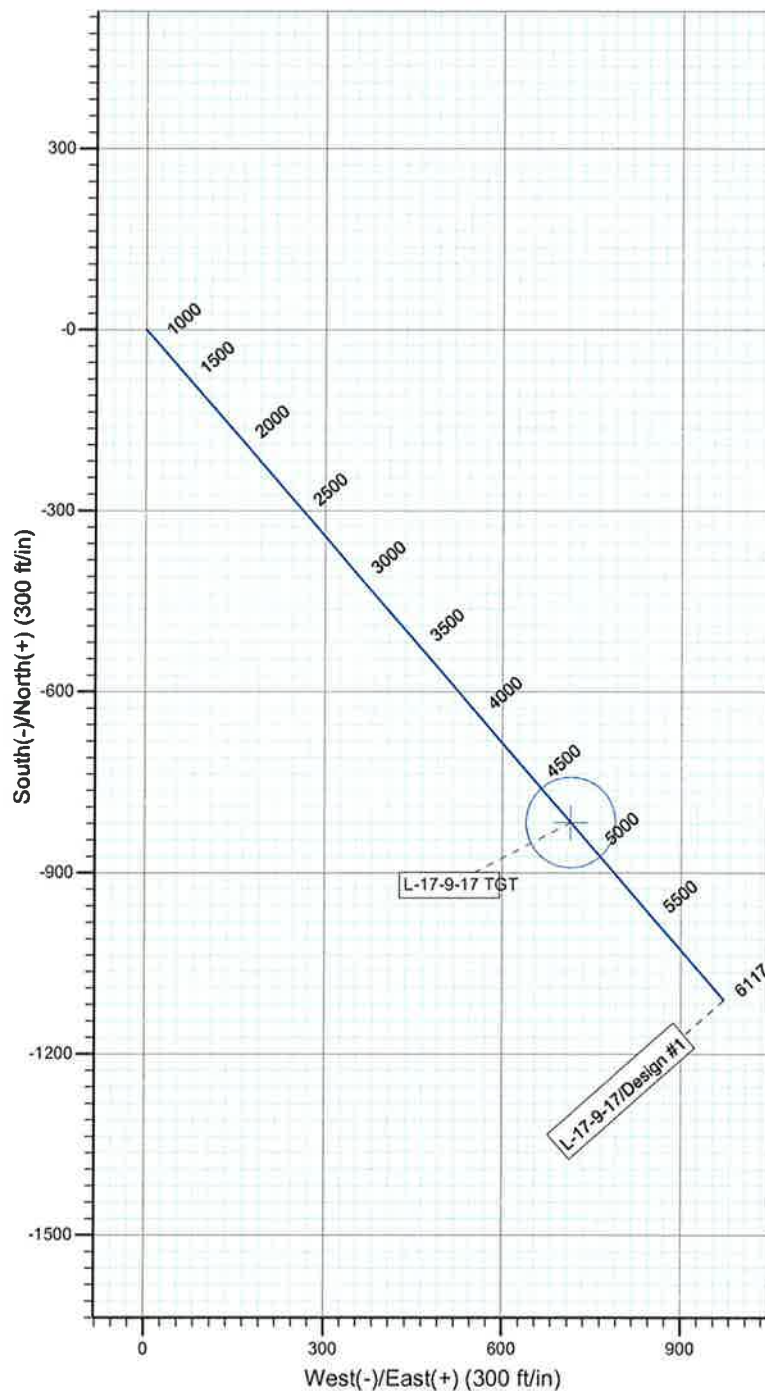
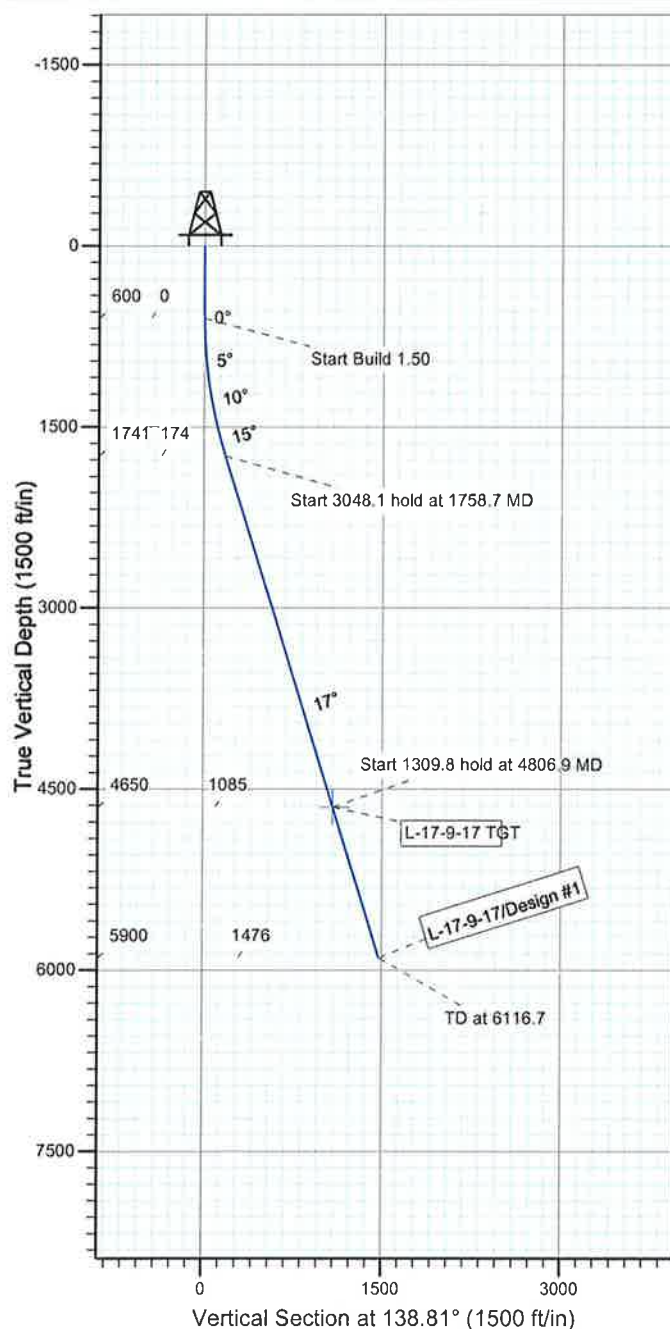
Project: USGS Myton SW (UT)  
 Site: SECTION 9  
 Well: L-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.40°

Magnetic Field  
 Strength: 52347.9snT  
 Dip Angle: 65.81°  
 Date: 2010/08/31  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
L-17-9-17 TGT	4650.0	-816.5	714.5	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1758.7	17.38	138.81	1741.0	-131.2	114.9	1.50	138.81	174.4	
4	4806.9	17.38	138.81	4650.0	-816.5	714.5	0.00	0.00	1085.0	L-17-9-17 TGT
5	6116.7	17.38	138.81	5900.0	-1110.9	972.2	0.00	0.00	1476.2	







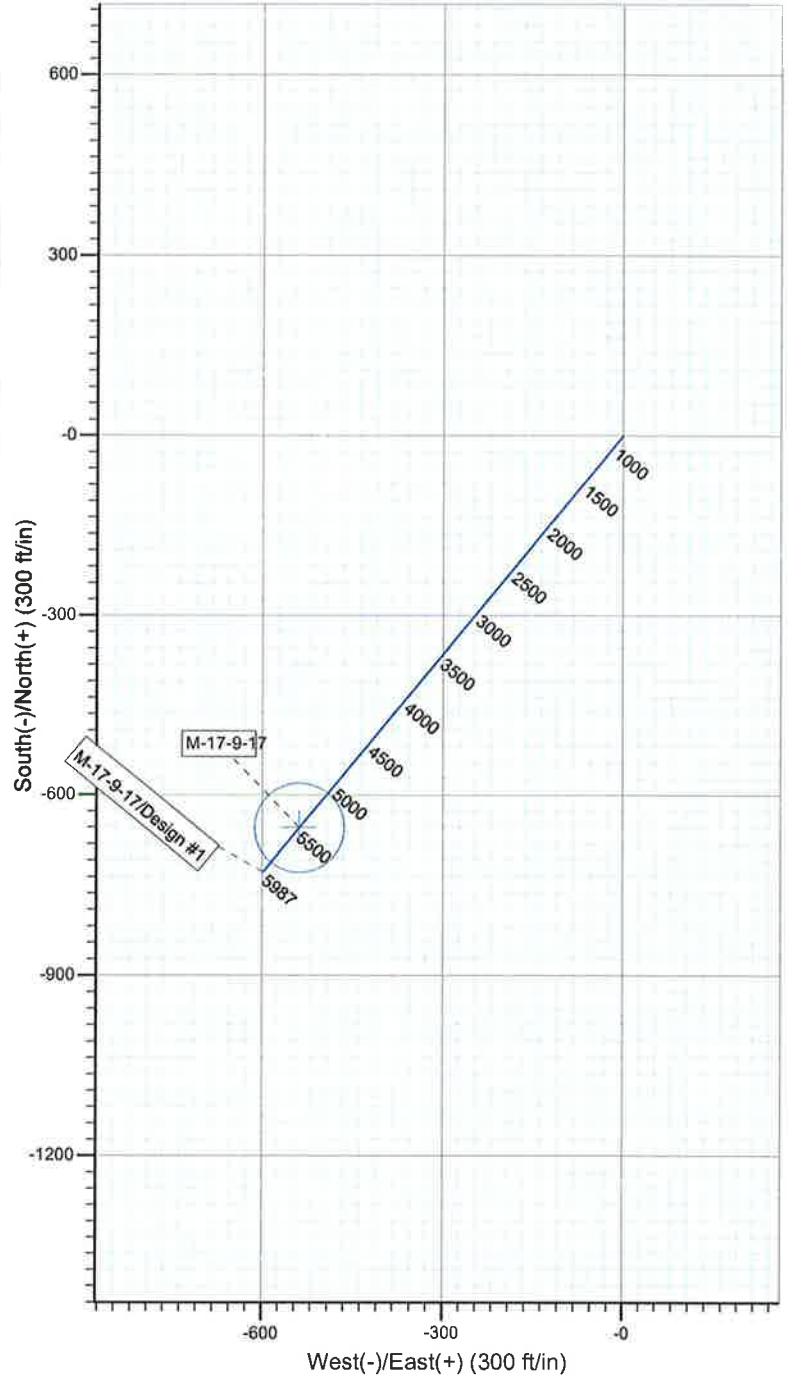
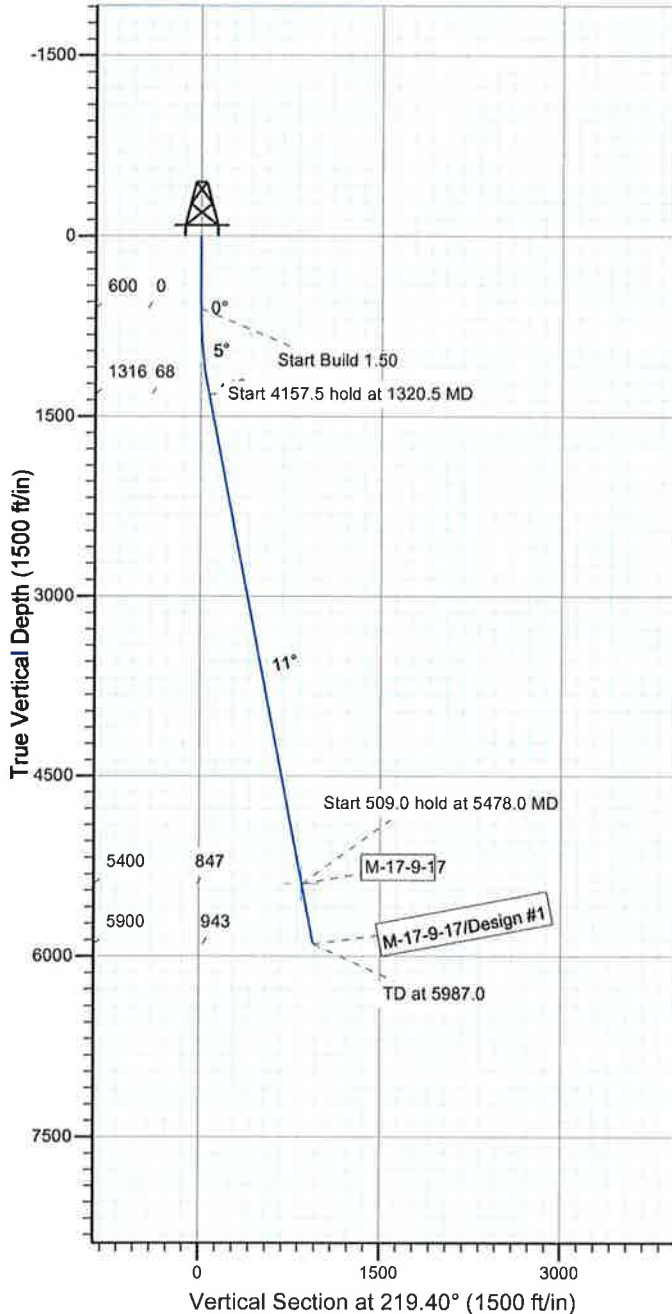
Project: USGS Myton SW (UT)  
 Site: SECTION 17 T9S, R17E  
 Well: M-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.39°

Magnetic Field  
 Strength: 52340.6snT  
 Dip Angle: 65.81°  
 Date: 2010/09/27  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-17-9-17	5400.0	-654.7	-537.8	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1320.5	10.81	219.40	1316.2	-52.3	-43.0	1.50	219.40	67.7	
4	5478.0	10.81	219.40	5400.0	-654.7	-537.8	0.00	0.00	847.3	M-17-9-17
5	5987.0	10.81	219.40	5900.0	-728.5	-598.4	0.00	0.00	942.7	





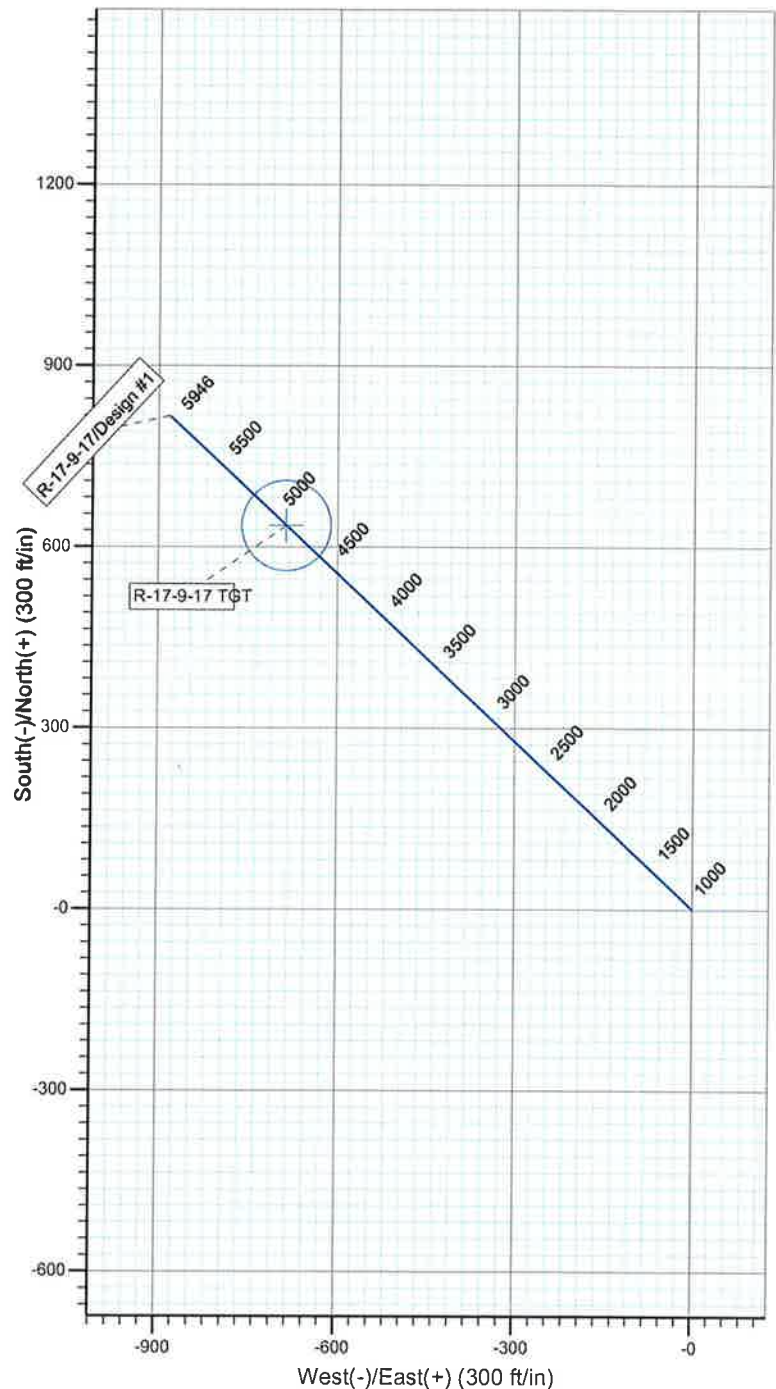
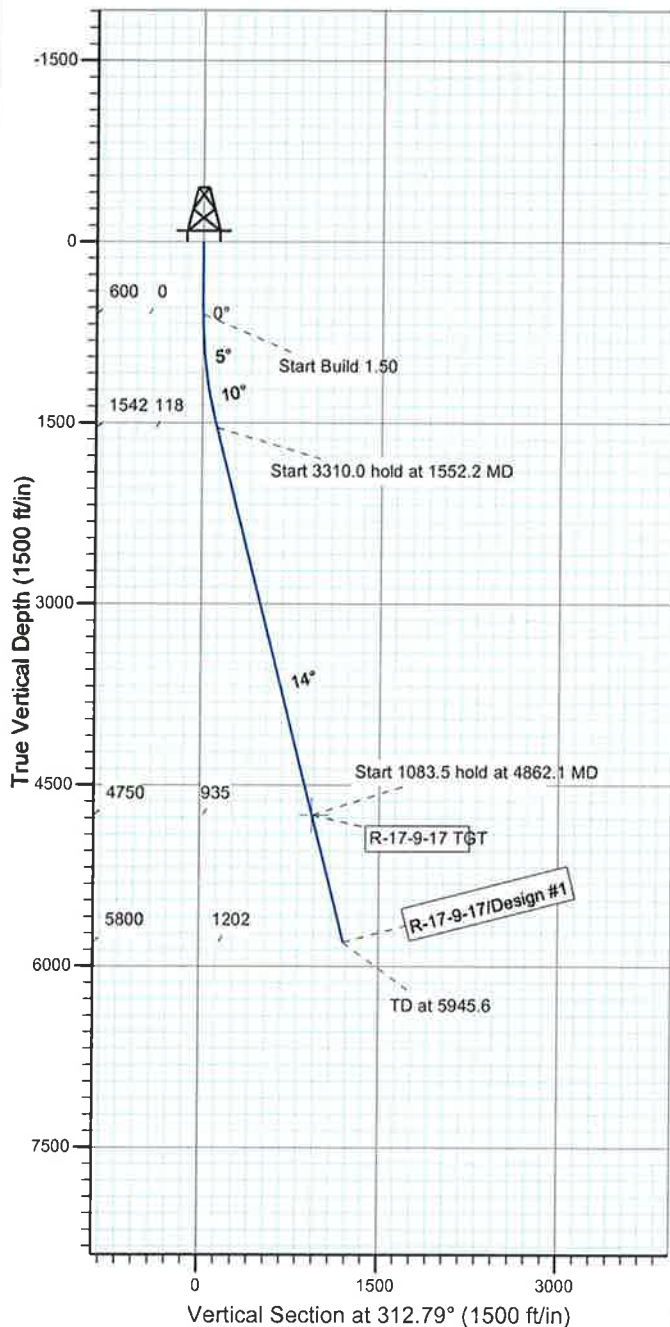
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 Site: SECTION 17 T9S, R17E  
 Well: R-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.39°

Magnetic Field  
 Strength: 52341.8snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLENG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
R-17-9-17 TGT	4750.0	634.9	-685.9	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1552.2	14.28	312.79	1542.4	80.2	-86.6	1.50	312.79	118.1	
4	4862.1	14.28	312.79	4750.0	634.9	-685.9	0.00	0.00	934.7	R-17-9-17 TGT
5	5945.6	14.28	312.79	5800.0	816.5	-882.1	0.00	0.00	1202.0	



**NEWFIELD**



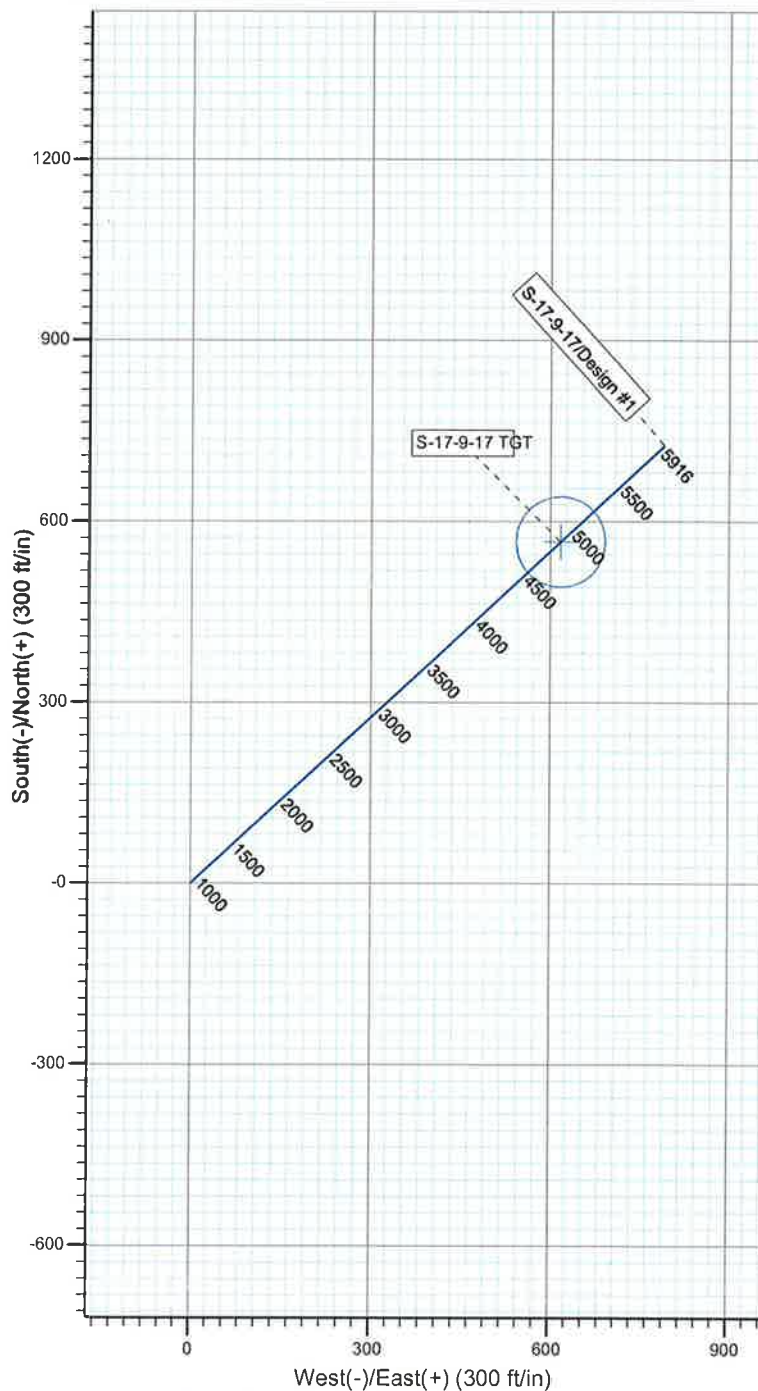
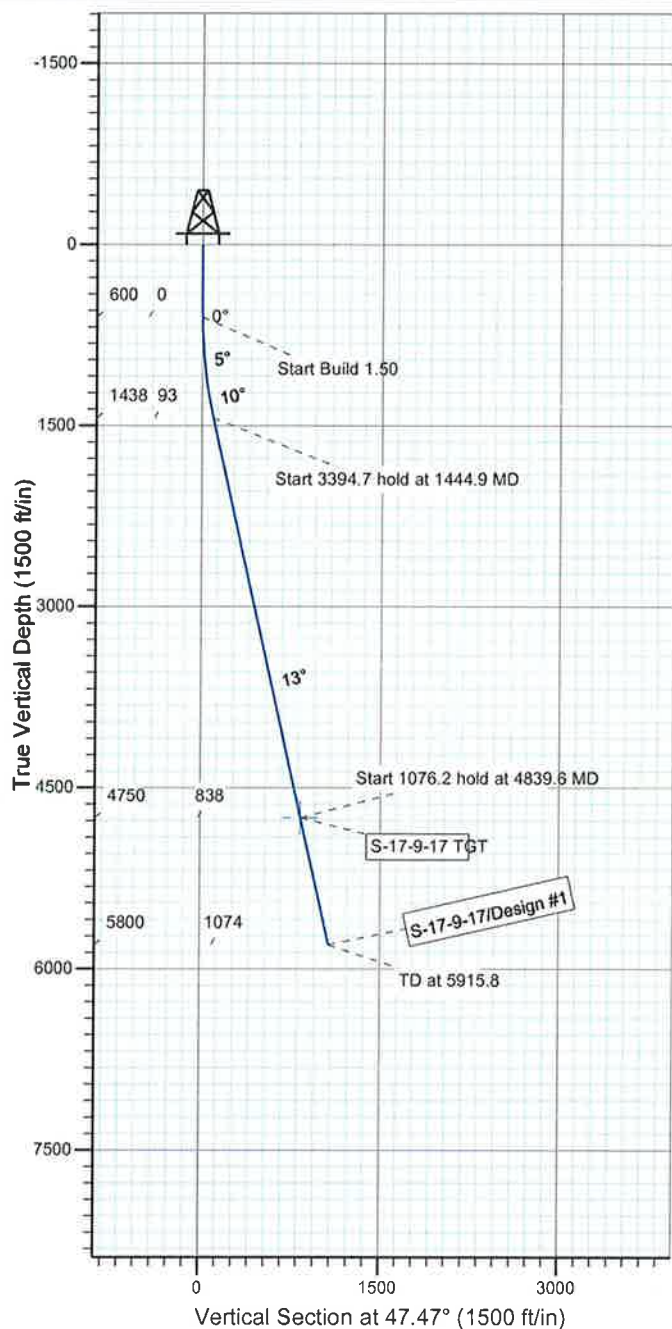
Project: USGS Myton SW (UT)  
 Site: SECTION 17 T9S, R17E  
 Well: S-17-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.39°

Magnetic Field  
 Strength: 52341.9snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'



**WELLBORE TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Shape
S-17-9-17 TGT	4750.0	566.3	617.4	Circle (Radius: 75.0)

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1444.9	12.67	47.47	1438.0	62.9	68.6	1.50	47.47	93.1	
4	4839.6	12.67	47.47	4750.0	566.3	617.4	0.00	0.00	837.8	S-17-9-17 TGT
5	5915.8	12.67	47.47	5800.0	725.9	791.4	0.00	0.00	1073.9	

**HATHAWAY H BURNHAM**  
 DIRECTIONAL & MWD SERVICES





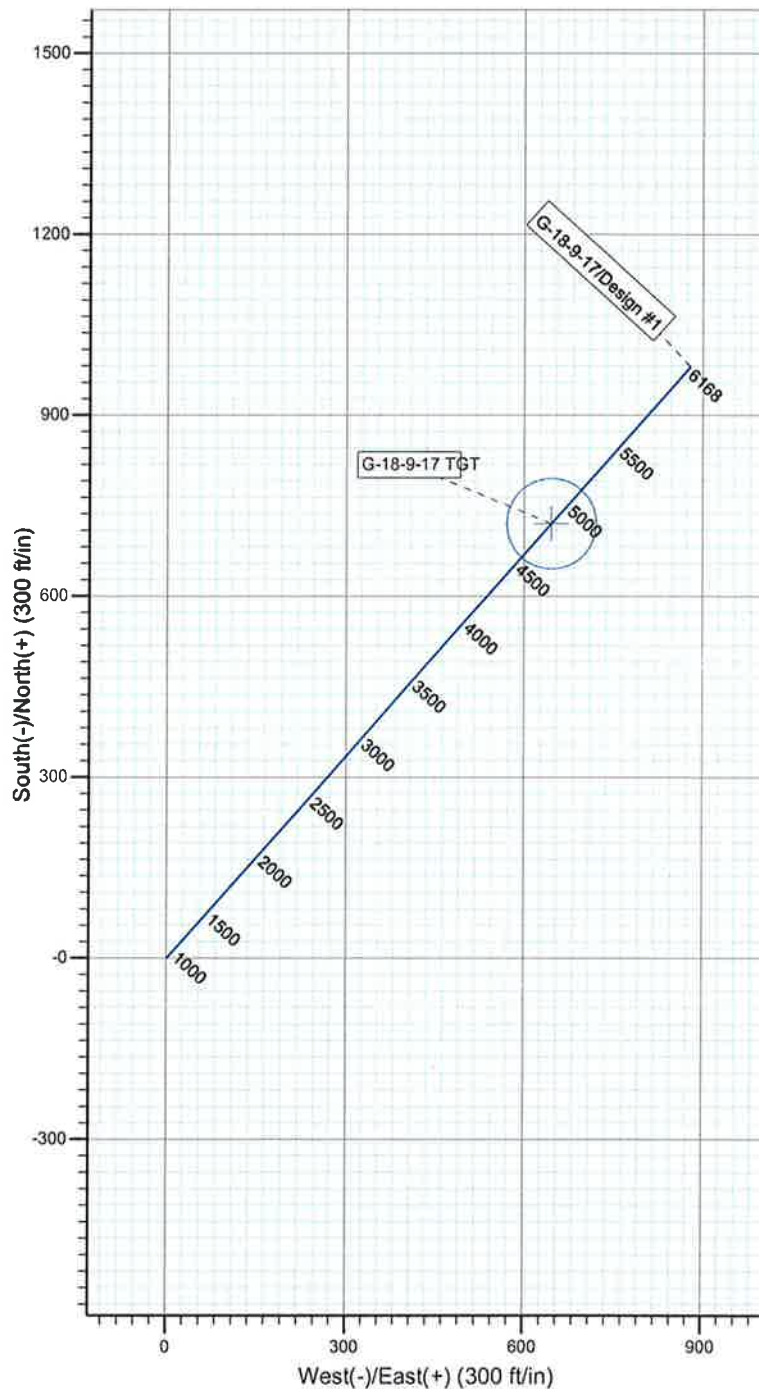
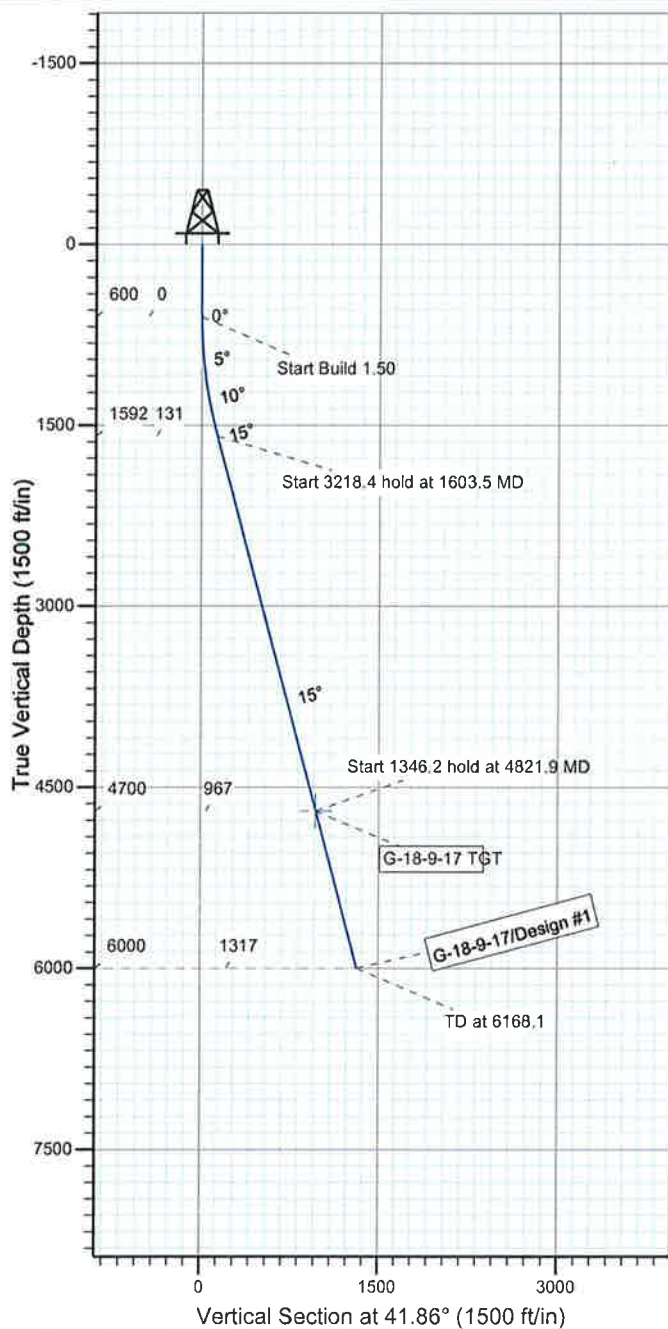
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: G-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.92°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52341.1nT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
G-18-9-17 TGT	4700.0	720.2	645.3	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1603.5	15.05	41.86	1592.0	97.6	87.5	1.50	41.86	131.1	
4	4821.9	15.05	41.86	4700.0	720.2	645.3	0.00	0.00	966.9	G-18-9-17 TGT
5	6168.1	15.05	41.86	6000.0	980.5	878.6	0.00	0.00	1316.6	





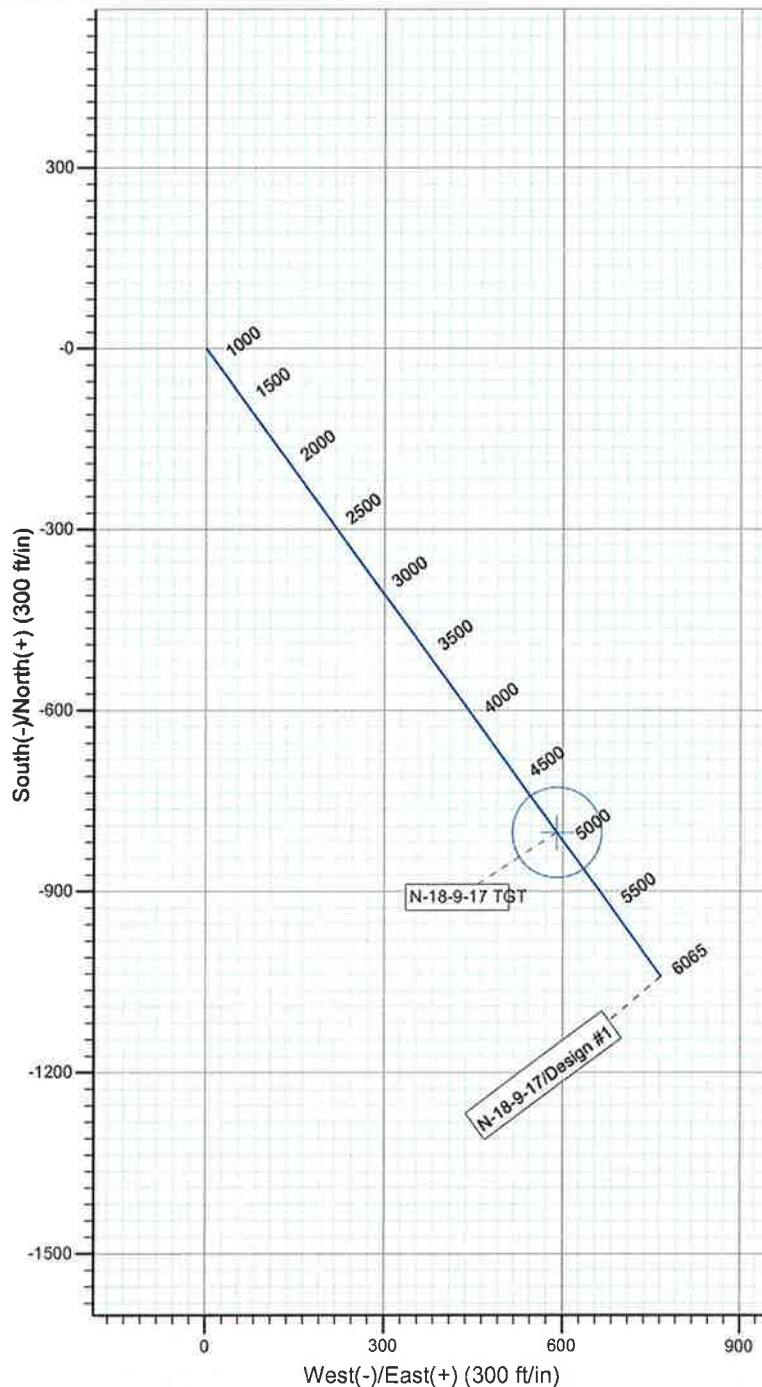
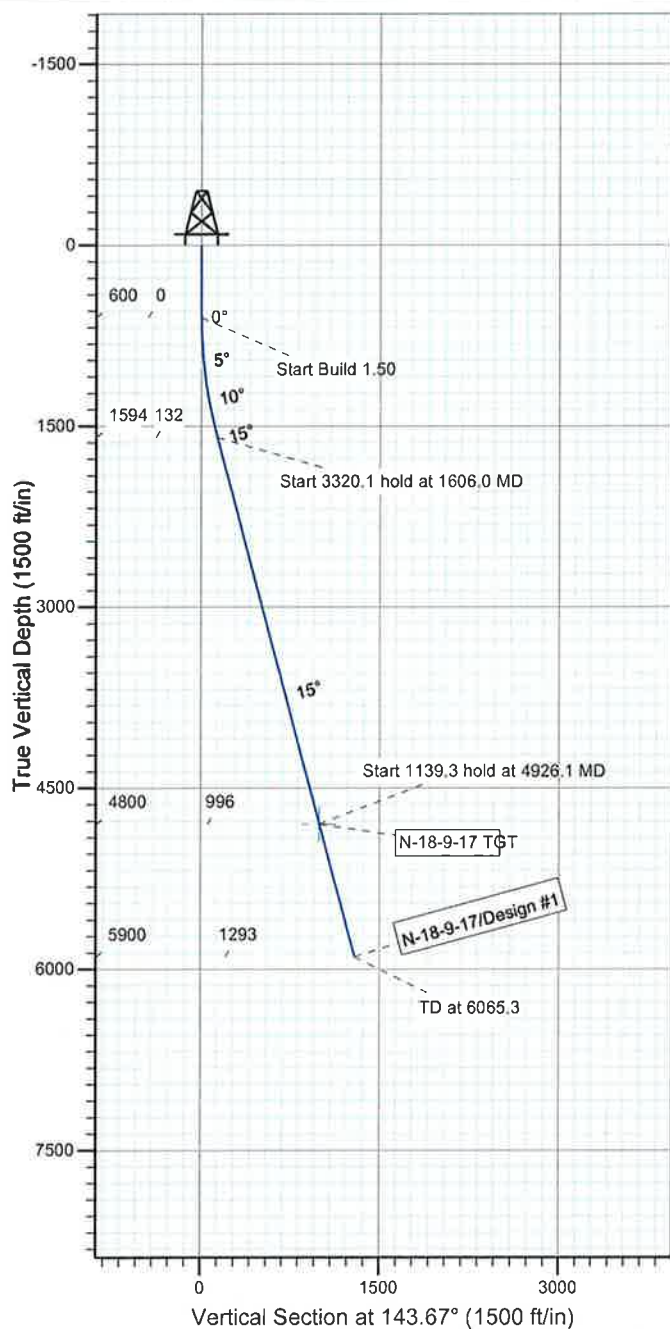
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: N-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.92°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52341.1snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
N-18-9-17 TGT	4800.0	-802.4	590.1	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1606.0	15.09	143.67	1594.4	-106.1	78.0	1.50	143.67	131.7	
4	4926.1	15.09	143.67	4800.0	-802.4	590.1	0.00	0.00	996.0	N-18-9-17 TGT
5	6065.3	15.09	143.67	5900.0	-1041.3	765.8	0.00	0.00	1292.6	







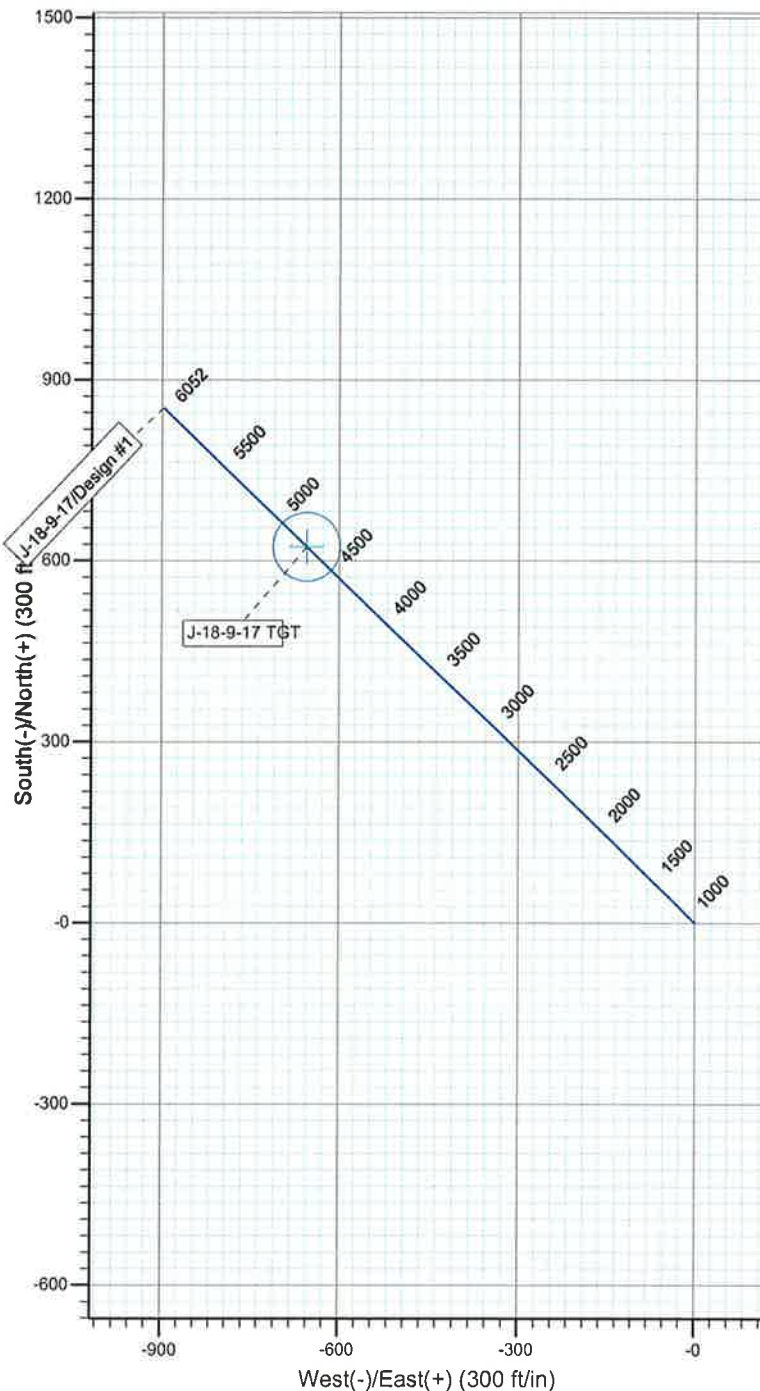
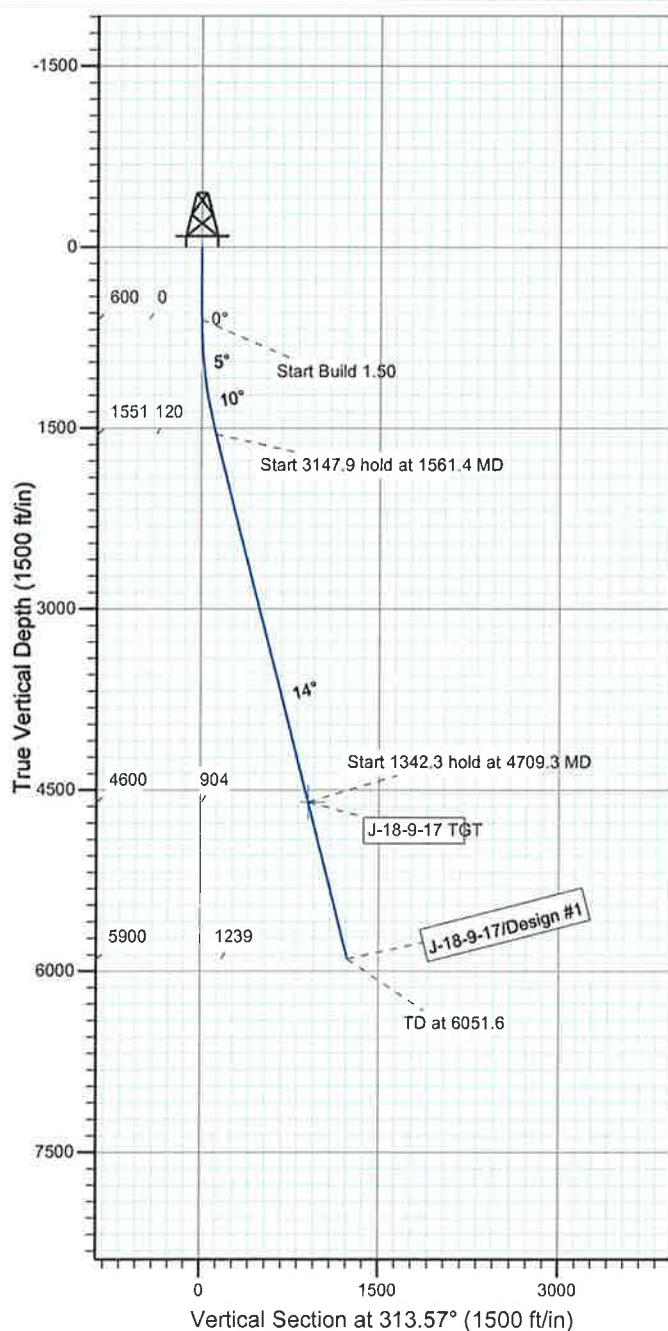
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: J-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.94°  
 Magnetic North: 10.46°

Magnetic Field  
 Strength: 52344.1snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
J-18-9-17 TGT	4600.0	623.3	-655.2	Circle (Radius: 57.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1561.4	14.42	313.57	1551.3	83.0	-87.2	1.50	313.57	120.4	
4	4709.3	14.42	313.57	4600.0	623.3	-655.2	0.00	0.00	904.3	J-18-9-17 TGT
5	6051.6	14.42	313.57	5900.0	853.7	-897.4	0.00	0.00	1238.6	





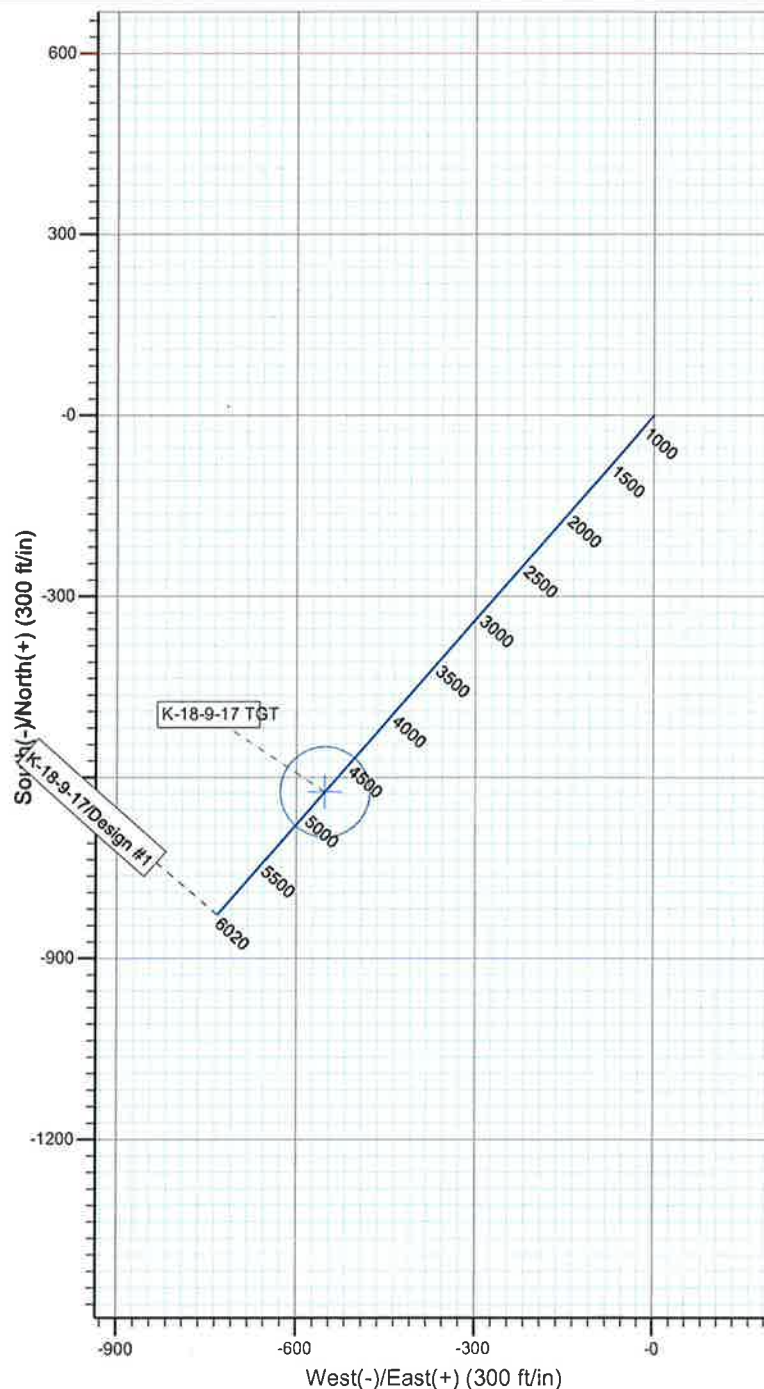
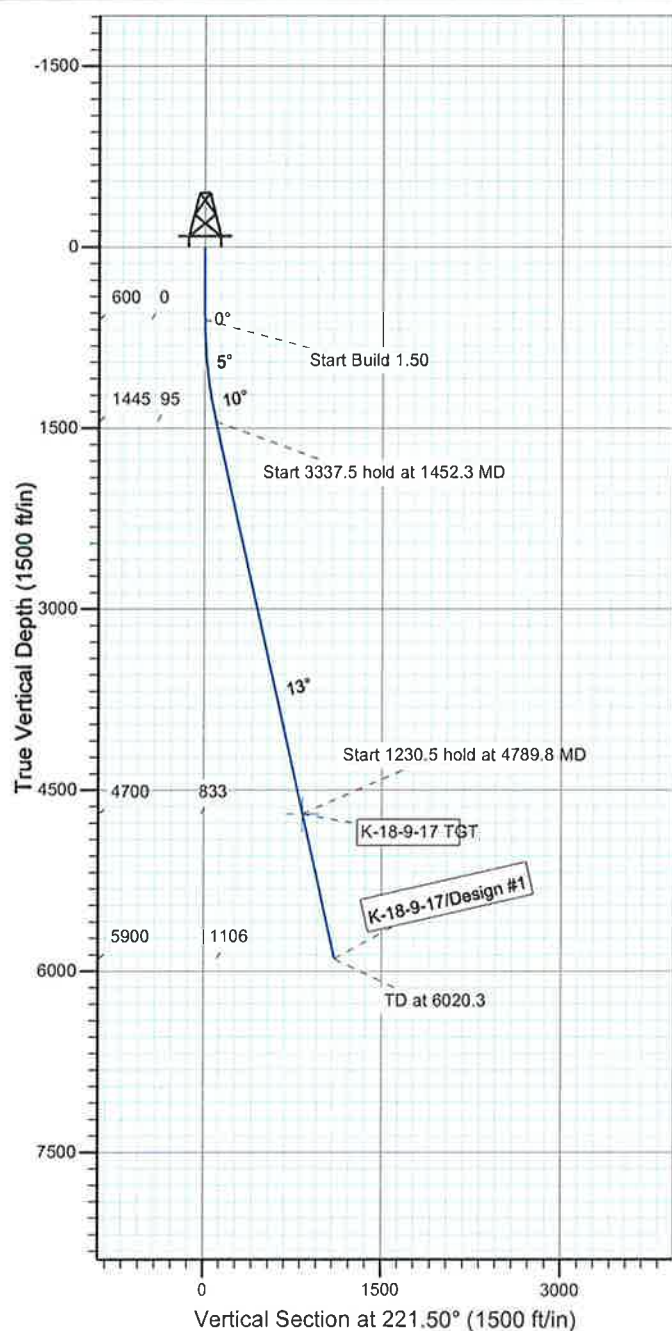
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: K-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North:  $-0.94^{\circ}$   
 Magnetic North:  $10.46^{\circ}$

Magnetic Field  
 Strength: 52344.1nT  
 Dip Angle:  $65.81^{\circ}$   
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
K-18-9-17 TGT	4700.0	-624.1	-552.1	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1452.3	12.79	221.50	1445.3	-70.9	-62.8	1.50	221.50	94.7	
4	4789.8	12.79	221.50	4700.0	-624.1	-552.1	0.00	0.00	833.3	K-18-9-17 TGT
5	6020.3	12.79	221.50	5900.0	-828.0	-732.6	0.00	0.00	1105.6	





**NEWFIELD**

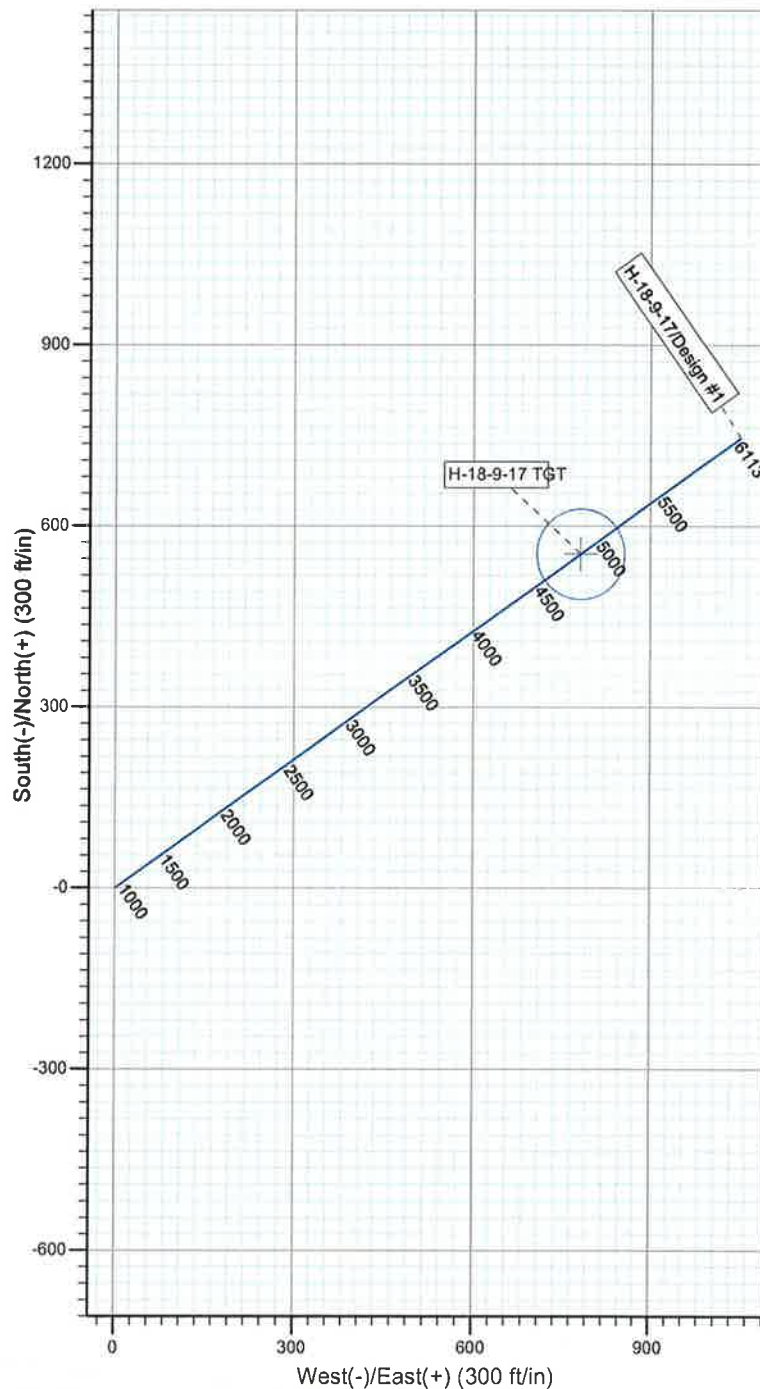
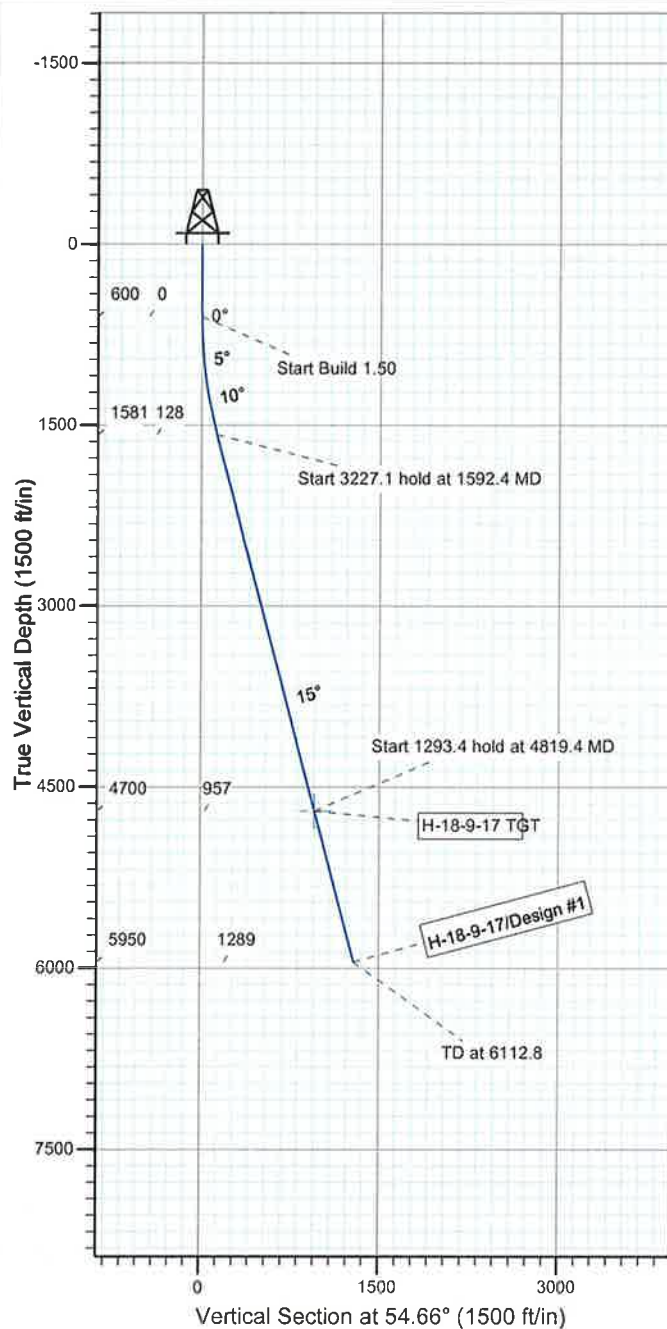
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: H-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52341.7snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'

**WELLBORE TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Shape
H-18-9-17 TGT	4700.0	553.7	780.8	Circle (Radius: 75.0)

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1592.4	14.89	54.66	1581.2	74.1	104.6	1.50	54.66	128.2	
4	4819.4	14.89	54.66	4700.0	553.7	780.8	0.00	0.00	957.2	H-18-9-17 TGT
5	6112.8	14.89	54.66	5950.0	745.8	1051.8	0.00	0.00	1289.4	

**HATHAWAY** **BURNHAM**  
 DIRECTIONAL & SOND SERVICES



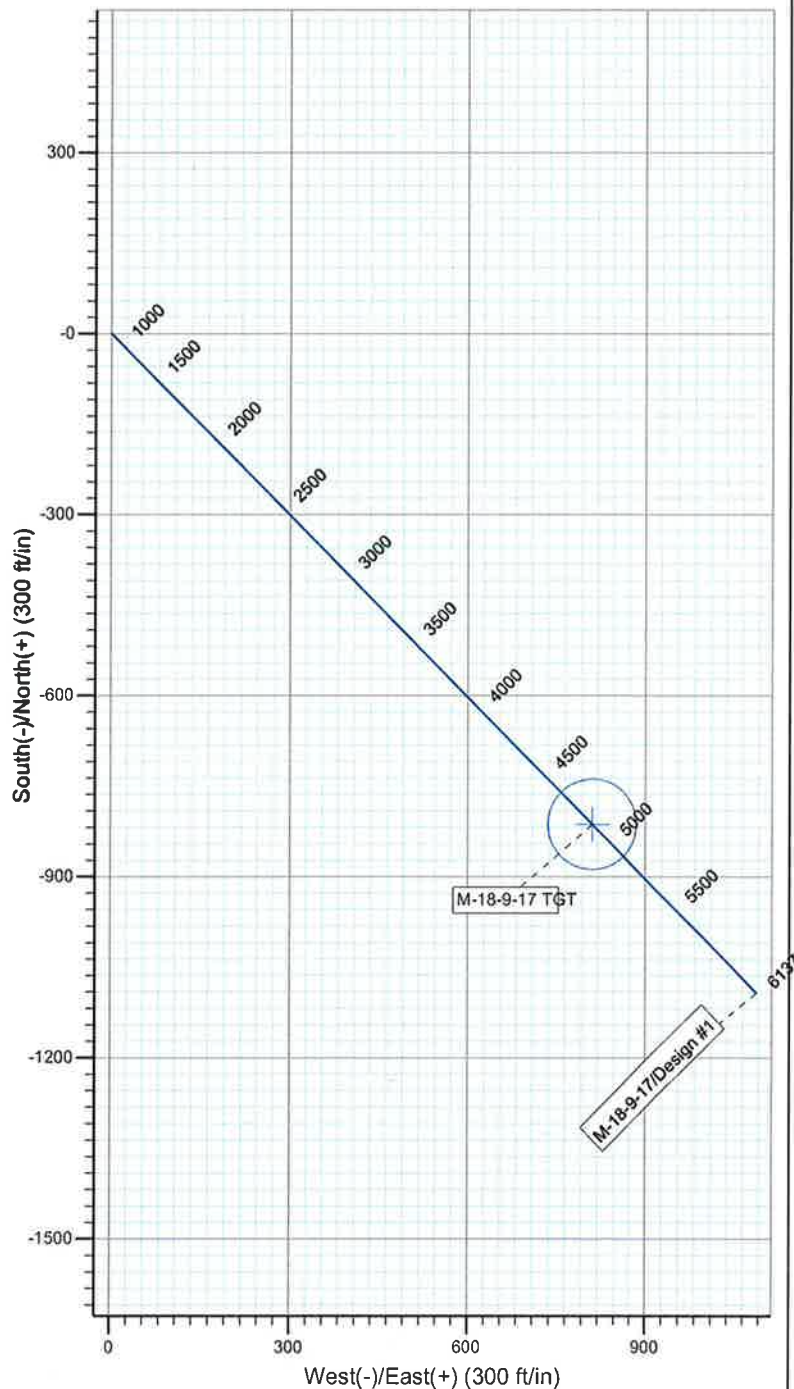
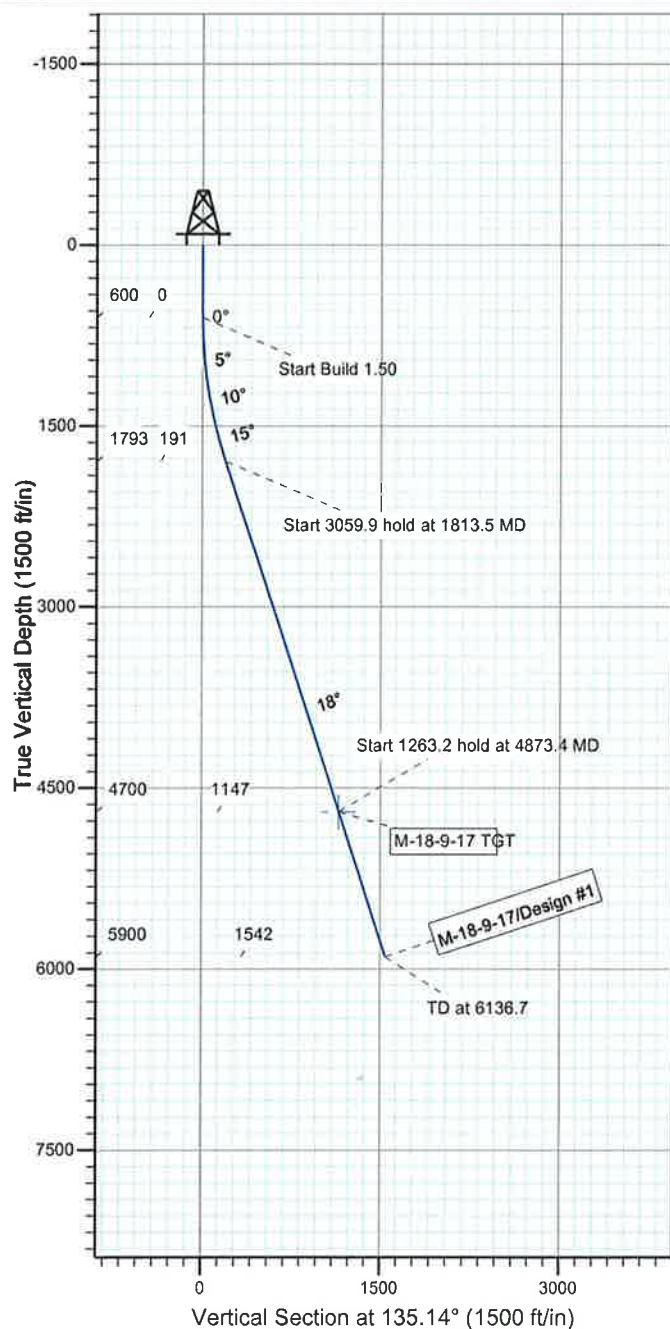
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: M-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52341.7snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-18-9-17 TGT	4700.0	-813.0	809.1	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1813.5	18.20	135.14	1793.2	-135.5	134.8	1.50	135.14	191.2	
4	4873.4	18.20	135.14	4700.0	-813.0	809.1	0.00	0.00	1147.0	M-18-9-17 TGT
5	6136.7	18.20	135.14	5900.0	-1092.8	1087.4	0.00	0.00	1541.6	





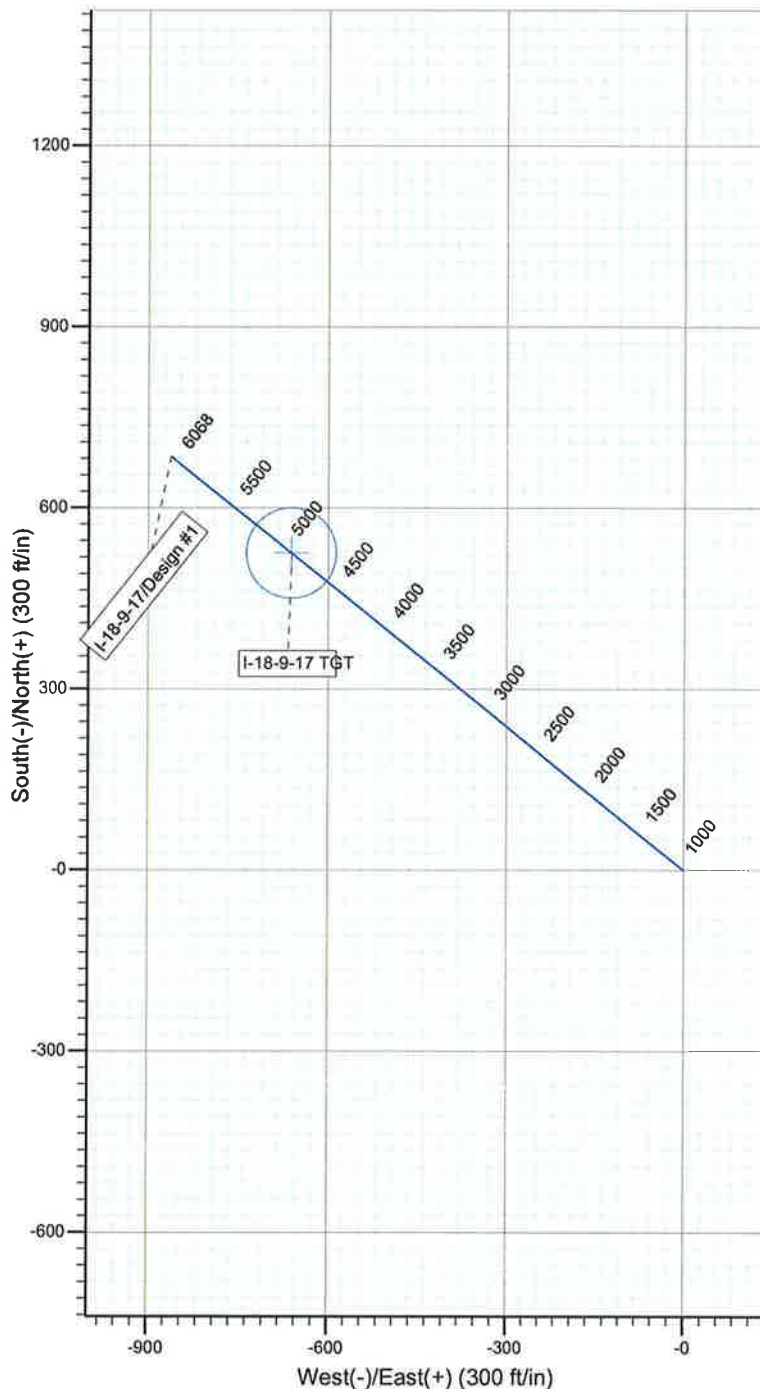
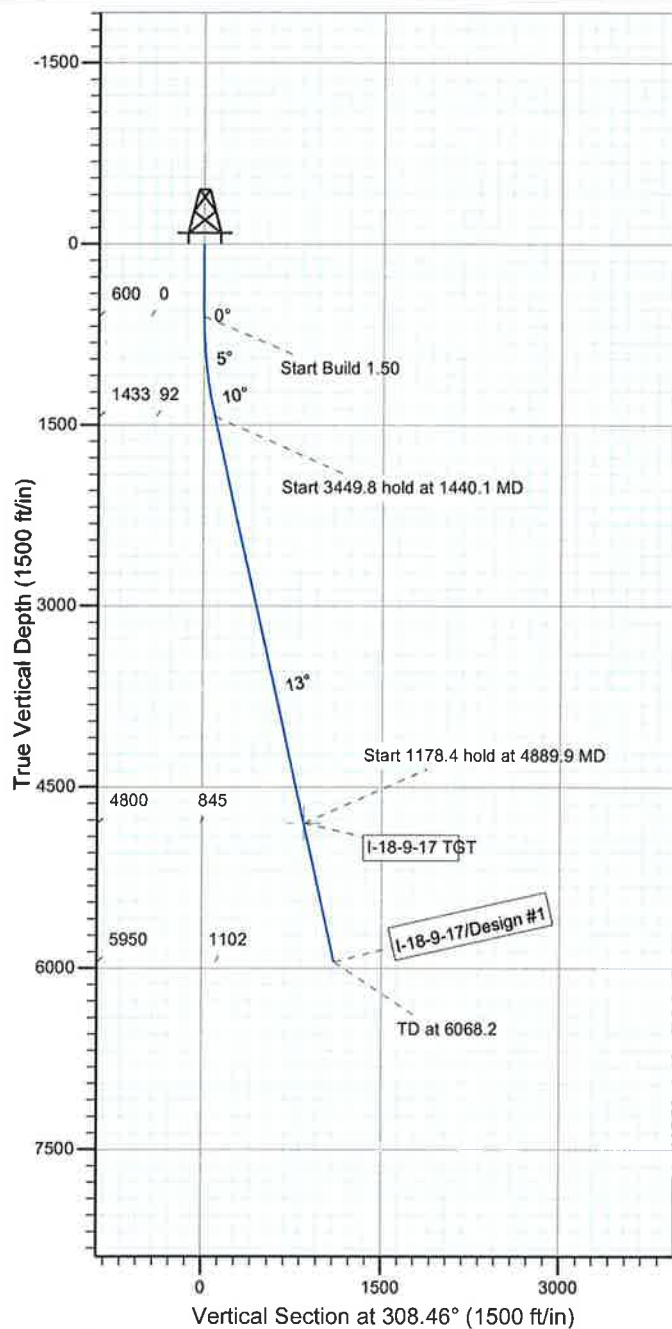
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: I-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.46°

Magnetic Field  
 Strength: 52341.9snT  
 Dip Angle: 65.81°  
 Date: 2010/09/13  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
I-18-9-17 TGT	4800.0	525.3	-661.4	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1440.1	12.60	308.46	1433.3	57.2	-72.0	1.50	308.46	92.0	
4	4889.9	12.60	308.46	4800.0	525.3	-661.4	0.00	0.00	844.6	I-18-9-17 TGT
5	6068.2	12.60	308.46	5950.0	685.2	-862.7	0.00	0.00	1101.7	







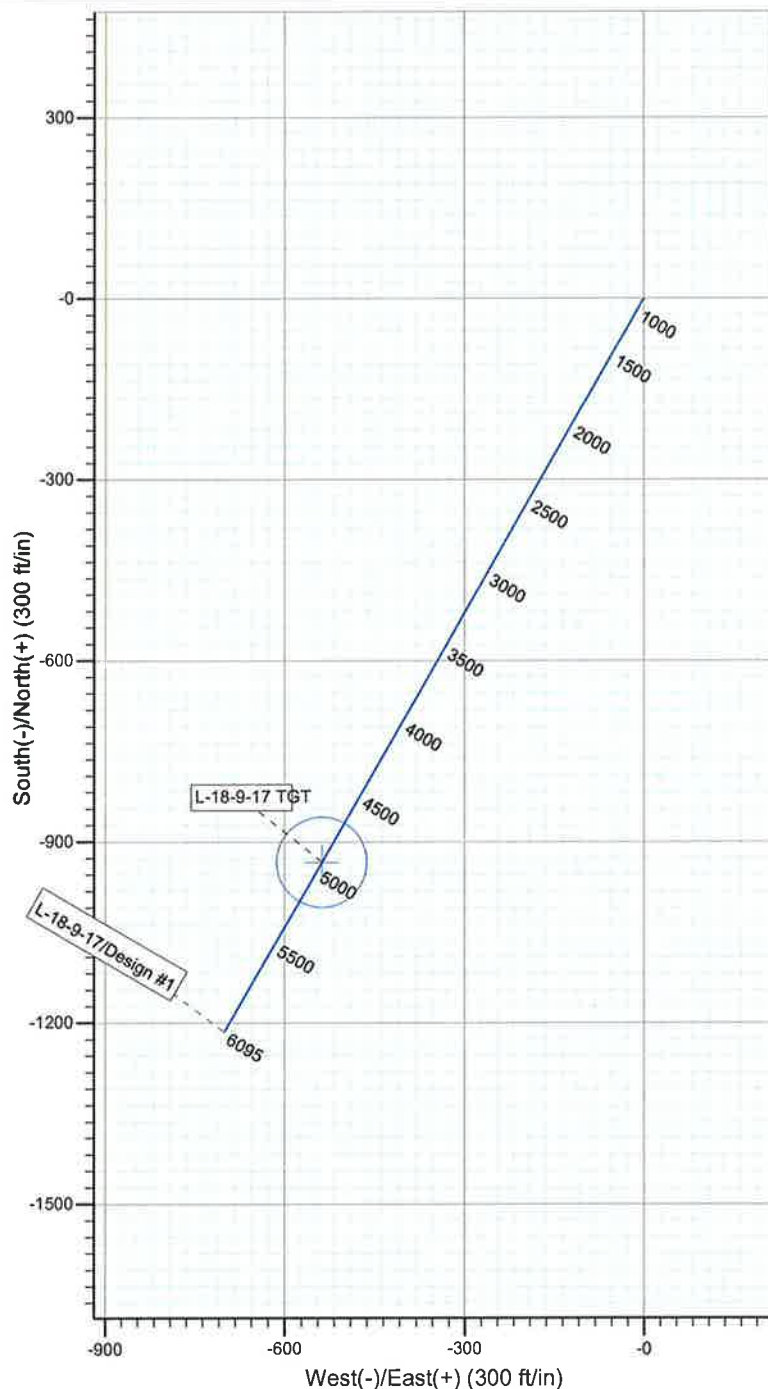
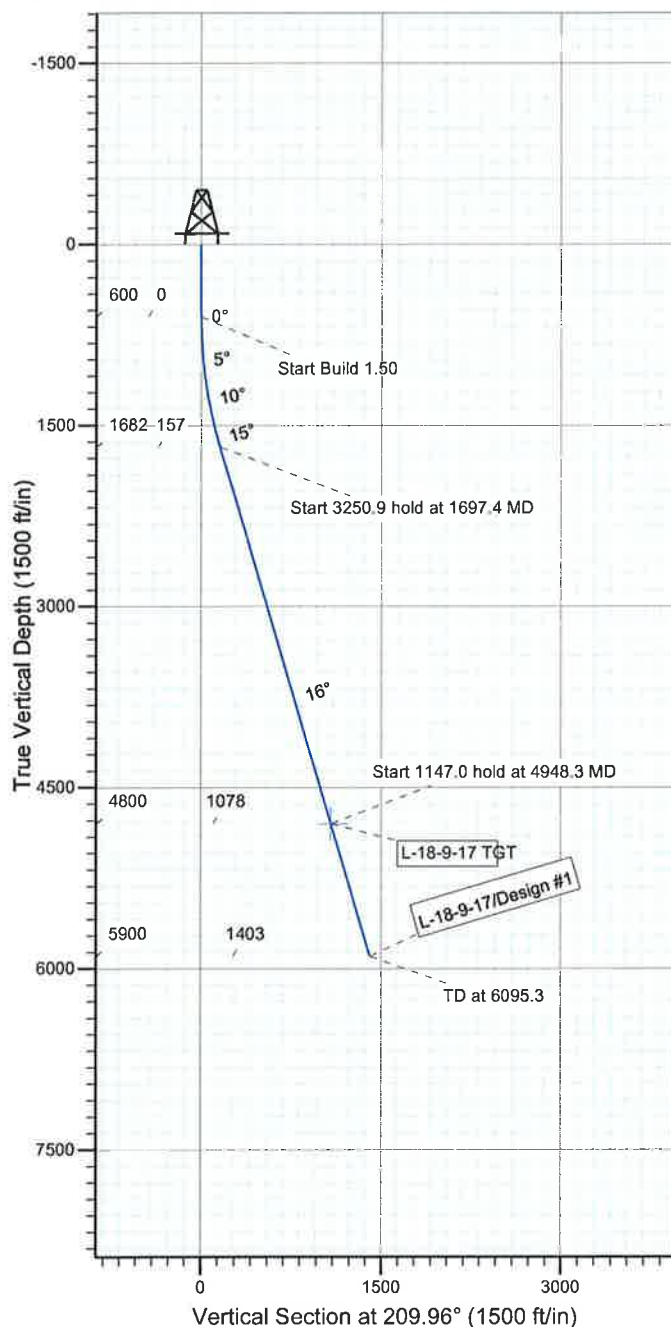
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: L-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.46°

Magnetic Field  
 Strength: 52341.9snT  
 Dip Angle: 65.81°  
 Date: 2010/09/13  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
L-18-9-17 TGT	4800.0	-933.7	-538.2	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1697.4	16.46	209.96	1682.4	-135.6	-78.2	1.50	209.96	156.6	
4	4948.3	16.46	209.96	4800.0	-933.7	-538.2	0.00	0.00	1077.7	L-18-9-17 TGT
5	6095.3	16.46	209.96	5900.0	-1215.3	-700.5	0.00	0.00	1402.8	





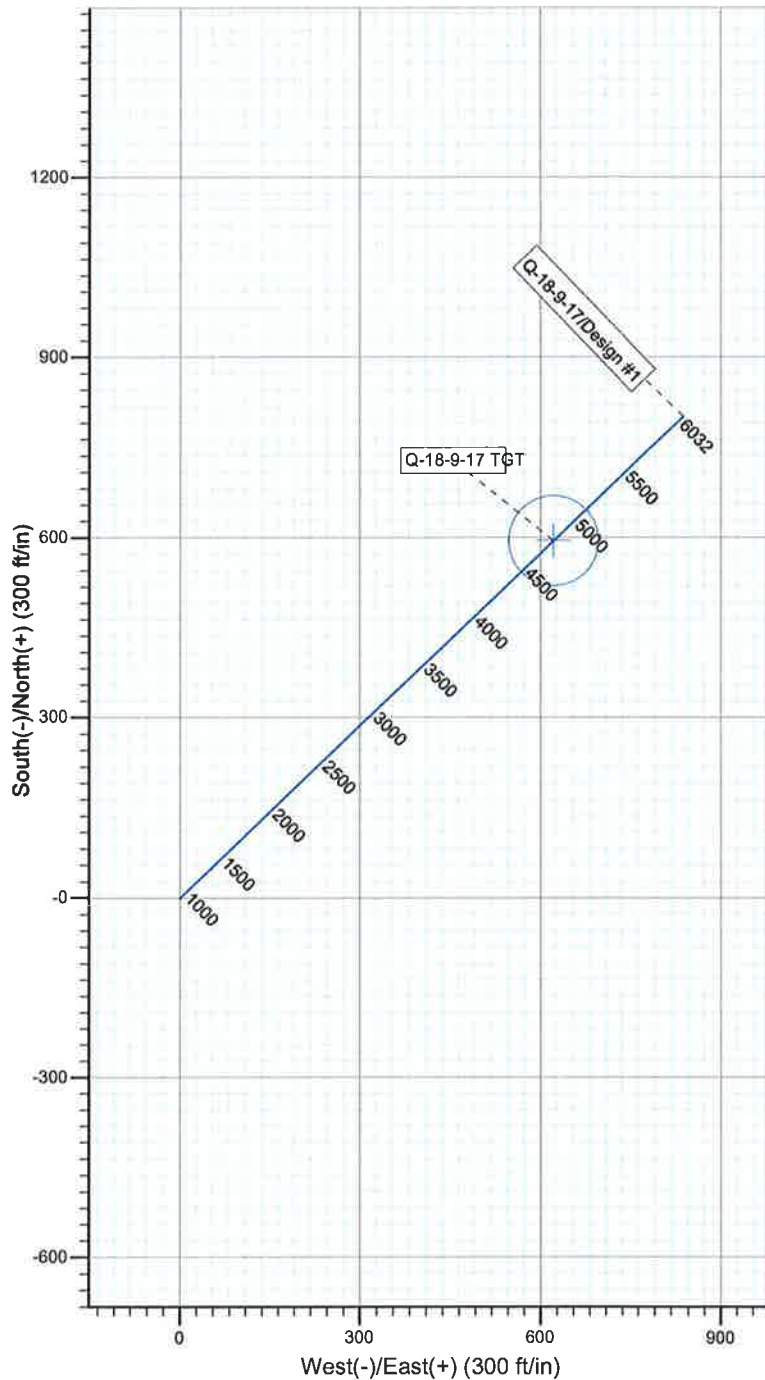
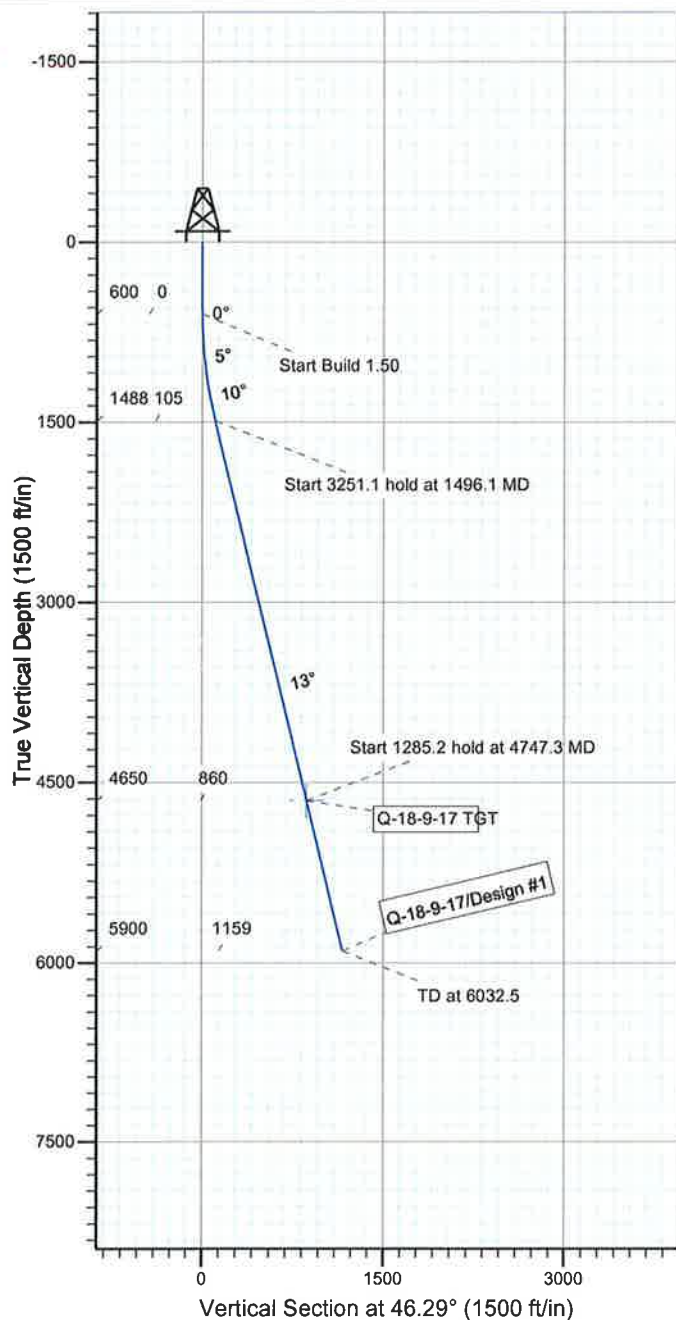
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: Q-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.92°  
 Magnetic North: 10.48°

Magnetic Field  
 Strength: 52334.4snT  
 Dip Angle: 65.80°  
 Date: 2010/09/15  
 Model: IGRF2010

KOP @ 600'  
 DOGLENG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Q-18-9-17 TGT	4650.0	594.5	621.9	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1496.1	13.44	46.29	1487.9	72.3	75.6	1.50	46.29	104.6	
4	4747.3	13.44	46.29	4650.0	594.5	621.9	0.00	0.00	860.4	Q-18-9-17 TGT
5	6032.5	13.44	46.29	5900.0	801.0	837.9	0.00	0.00	1159.1	





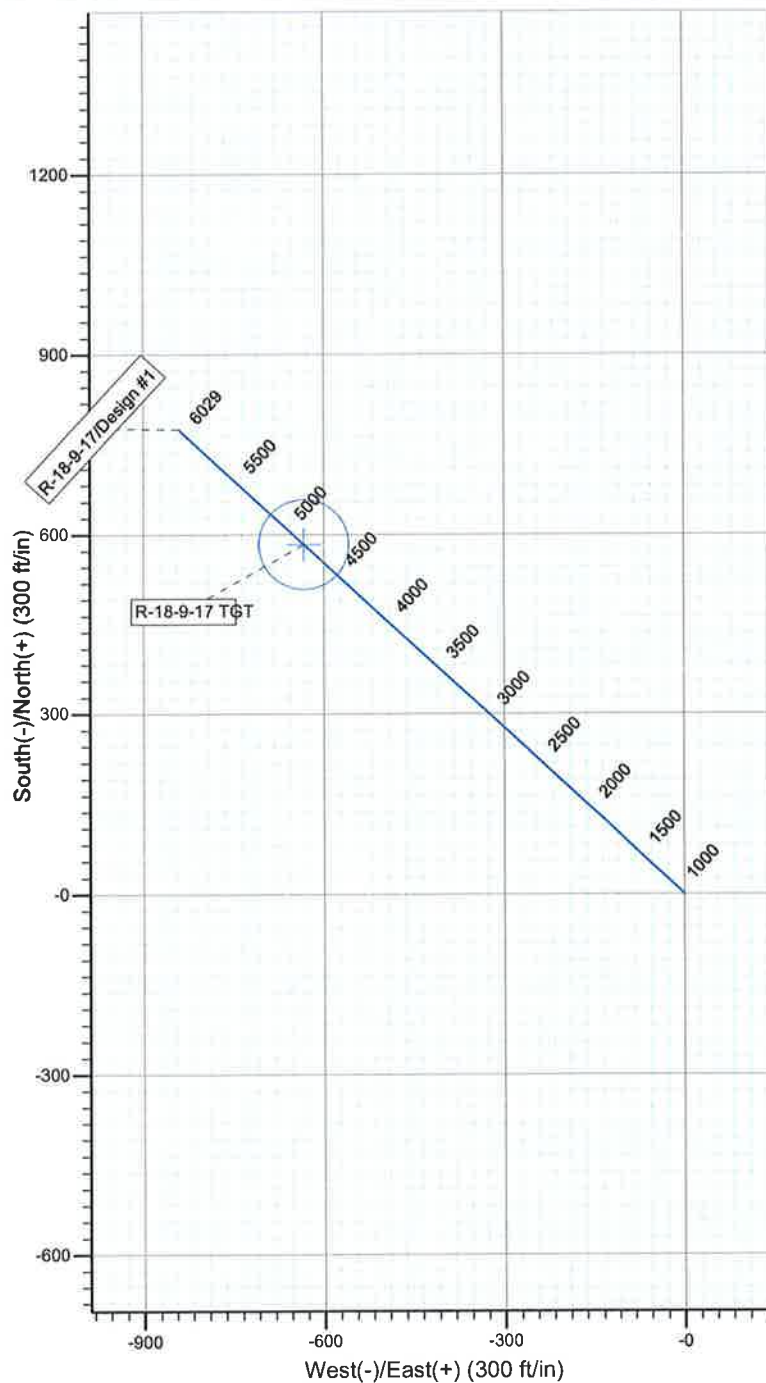
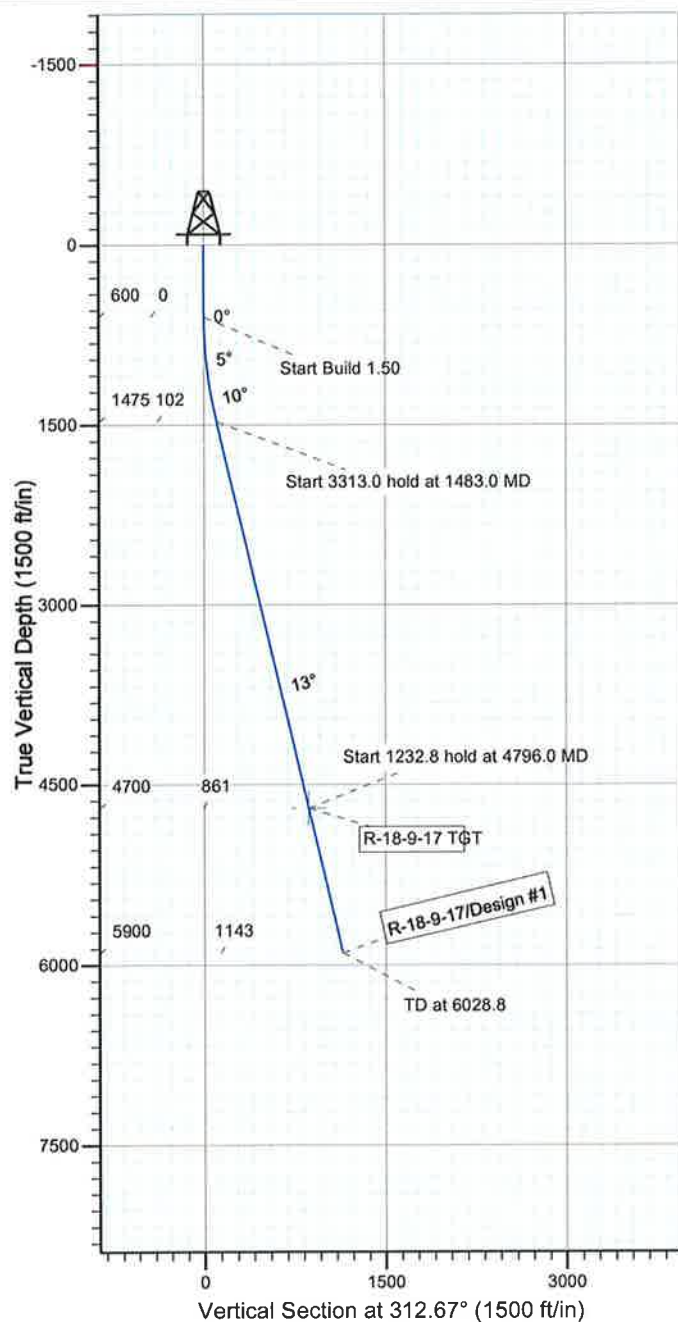
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: R-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.47°

Magnetic Field  
 Strength: 52336.1nT  
 Dip Angle: 65.80°  
 Date: 2010/09/15  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
R-18-9-17 TGT	4700.0	583.3	-632.8	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1483.0	13.25	312.67	1475.2	68.9	-74.7	1.50	312.67	101.6	
4	4796.0	13.25	312.67	4700.0	583.3	-632.8	0.00	0.00	860.7	R-18-9-17 TGT
5	6028.8	13.25	312.67	5900.0	774.8	-840.5	0.00	0.00	1143.1	





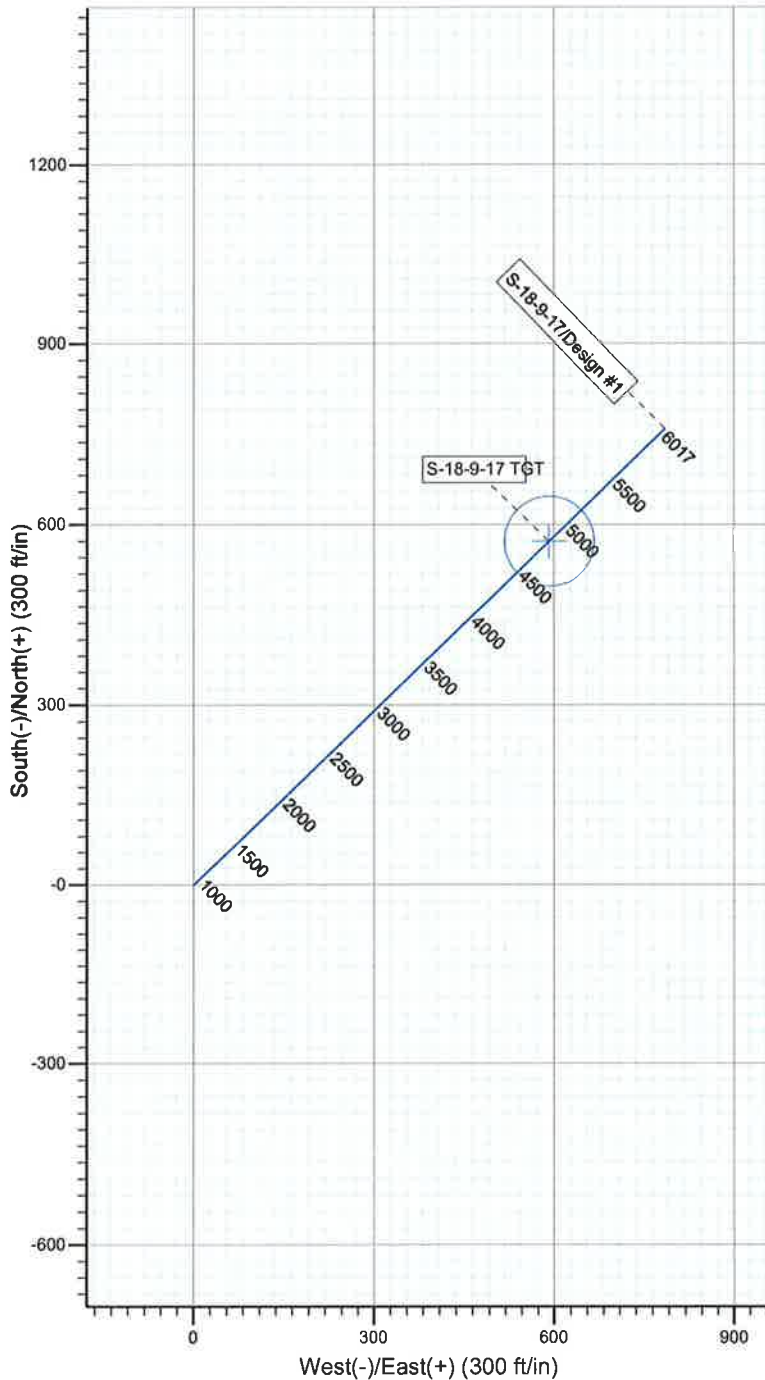
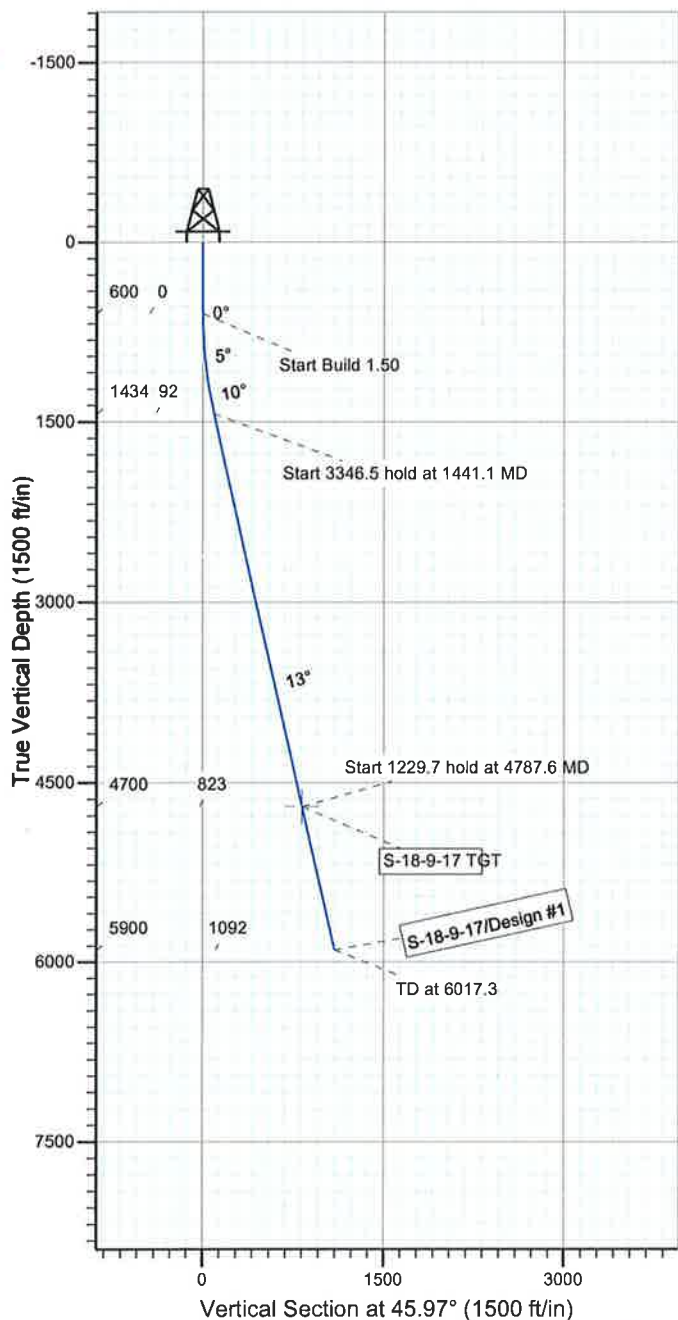
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: S-18-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to Grid North  
 True North: -0.93°  
 Magnetic North: 10.47°

Magnetic Field  
 Strength: 52336.1snT  
 Dip Angle: 65.80°  
 Date: 2010/09/15  
 Model: IGRF2010

KOP @ 600'  
 DOGLEG RATE 1.5 DEG/100'  
 TARGET RADIUS IS 75'



#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-18-9-17 TGT	4700.0	572.1	591.8	Circle (Radius: 75.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1441.1	12.62	45.97	1434.3	64.1	66.3	1.50	45.97	92.2	
4	4787.6	12.62	45.97	4700.0	572.1	591.8	0.00	0.00	823.1	S-18-9-17 TGT
5	6017.3	12.62	45.97	5900.0	758.8	784.9	0.00	0.00	1091.7	





# WORKSHEET

## APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 11/24/2010

**API NO. ASSIGNED:** 43013504990000

**WELL NAME:** Greater Monument Butte G-18-9-17

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

**PROPOSED LOCATION:** SWNW 18 090S 170E

**Permit Tech Review:** ☒

**SURFACE:** 1947 FNL 0693 FWL

**Engineering Review:** ☐

**BOTTOM:** 0984 FNL 1588 FWL

**Geology Review:** ☒

**COUNTY:** DUCHESNE

**LATITUDE:** 40.03278

**LONGITUDE:** -110.05514

**UTM SURF EASTINGS:** 580617.00

**NORTHINGS:** 4431613.00

**FIELD NAME:** MONUMENT BUTTE

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU-72106

**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

**SURFACE OWNER:** 1 - Federal

**COALBED METHANE:** NO

### RECEIVED AND/OR REVIEWED:

- ☒ PLAT
- ☒ Bond: FEDERAL - WYB000493
- ☐ Potash
- ☐ Oil Shale 190-5
- ☐ Oil Shale 190-3
- ☐ Oil Shale 190-13
- ☒ Water Permit: 437478
- ☐ RDCC Review:
- ☐ Fee Surface Agreement
- ☐ Intent to Commingle

Commingle Approved

### LOCATION AND SITING:

- ☐ R649-2-3.
- Unit: GMBU (GRRV)
- ☐ R649-3-2. General
- ☐ R649-3-3. Exception
- ☒ Drilling Unit
- Board Cause No: Cause 213-11
- Effective Date: 11/30/2009
- Siting: Suspends General Siting
- ☒ R649-3-11. Directional Drill

**Comments:** Presite Completed

**Stipulations:** 4 - Federal Approval - dmason  
15 - Directional - dmason  
27 - Other - bhill





GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

### Permit To Drill

\*\*\*\*\*

**Well Name:** Greater Monument Butte G-18-9-17  
**API Well Number:** 43013504990000  
**Lease Number:** UTU-72106  
**Surface Owner:** FEDERAL  
**Approval Date:** 12/6/2010

**Issued to:**

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-72106
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name NA
2. Name of Operator Newfield Production Company		7. If Unit or CA Agreement, Name and No. Greater Monument Butte
3a. Address Route #3 Box 3630, Myton UT 84052		8. Lease Name and Well No. Greater Monument Butte G-18-9-17
3b. Phone No. (include area code) (435) 646-3721		9. API Well No. 43 013 50499
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface (LOT #2) SW/NW 1947' FNL 693' FWL Sec. 18, T9S R17E (UTU-72106) At proposed prod. zone NE/NW 984' FNL 1588' FWL Sec. 18, T9S R17E (UTU-72106)		10. Field and Pool, or Exploratory Monument Butte
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 18, T9S R17E		12. County or Parish Duchesne
14. Distance in miles and direction from nearest town or post office* Approximately 16.8 miles southeast of Myton, UT		13. State UT
15. Distance from proposed* location to nearest property or lease line, ft. Approx. 1052' f/lease, NA' f/unit (Also to nearest drig. unit line, if any)	16. No. of acres in lease 1,188.92	17. Spacing Unit dedicated to this well 20 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 764'	19. Proposed Depth 6,168'	20. BLM/BIA Bond No. on file WYB000493
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5467' GL	22. Approximate date work will start* 1st Qtr. 2011	23. Estimated duration (7) days from SPUD to rig release

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Mandie Crozier</i>	Name (Printed/Typed) Mandie Crozier	Date 11/24/10
Title Regulatory Specialist		

Approved by (Signature) <i>Jerry Kenczka</i>	Name (Printed/Typed) Jerry Kenczka	Date MAY 02 2011
Title Assistant Field Manager Lands & Mineral Resources		
Office VERNAL FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

UDOGM

RECEIVED  
MAY 04 2011  
DIV. OF OIL, GAS & MINING

RECEIVED  
NOV 29 2010

NOTICE OF APPROVAL

BLM VERNAL, UTAH



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4401



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company:	Newfield Production Company	Location:	Lot 2, Sec. 18, T9S, R17E (S) NENW, Sec. 18, T8S, R16E (B)
Well No:	Greater Monument Butte G-18-9-17	Lease No:	UTU-72106
API No:	43-013-50499	Agreement:	Greater Monument Butte Unit

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:ut_vn_opreport@blm.gov">ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.



***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**CONDITIONS OF APPROVAL:**

- Construction and drilling is not allowed from May 1<sup>st</sup> – June 15<sup>th</sup> to minimize impacts during Mountain plover nesting.
- Construction and drilling is not allowed from March 1 – August 31 to minimize impacts during burrowing owl nesting.
- If it is anticipated that construction or drilling will occur during the given timing restrictions, a BLM or qualified biologist shall be notified so surveys can be conducted. Depending upon the results of the surveys, permission to proceed may or may not be recommended or granted by the BLM authorized officer.
  - White-tailed prairie dog burrows and animals will be recorded/mapped while conducting (to protocol) burrowing owl surveys
  - Mountain plover surveys will be conducted to protocol by a professional environmental consulting firm biologist prior to any ground disturbing activities. Reports from survey results must be reviewed by a BLM minerals biologist prior to proceeding with the project.
  - Prior to any surface disturbing activities between March 1<sup>st</sup> and August 31<sup>st</sup>, a BLM biologist or a BLM-approved contractor will survey all areas during April or May within a range of a half-mile from proposed surface disturbances for active raptor nests. If occupied/ active raptor nests are found, construction will not occur during the nesting season for that species within its species-specific buffer.
- The reclamation seed mix will incorporate low growing grasses and not crested wheatgrass since this negatively impacts mountain plover habitat.
- Hospital mufflers will be installed on new and existing pump jacks at the host well locations.

- Screening will be placed on stacks and on other openings of heater-treaters or fired vessels to prevent entry by migratory birds.

### **Reclamation**

- Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.
- Appropriate erosion control and re-vegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

### **Seed Mix (Interim and Final Reclamation)**

Common Name	Latin Name	Pure Live Seed (lbs/acre)	Seed Planting Depth
Squirreltail grass	<i>Elymus elymoides</i>	2.0	1/4 - 1/2"
Needle and thread grass	<i>Hesperostipa comata</i>	2.0	1/2"
Siberian Wheatgrass	<i>Agropyron fragile</i>	2.0	1/2"
Shadscale saltbush	<i>Atriplex confertifolia</i>	2.0	1/2"
Four-wing saltbush	<i>Atriplex canescens</i>	2.0	1/2"
Gardner's saltbush	<i>Atriplex gardneri</i>	2.0	1/2"
Blue flax (Lewis flax)	<i>Linum lewisii</i>	1.0	1/8 - 1/4"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.

### **Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) three (3) growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

***DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

**SITE SPECIFIC DOWNHOLE COAs:**

- Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or work-over program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (1/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Spud  
BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 26 Submitted By  
Branden Arnold Phone Number 435-401-0223  
Well Name/Number GMB G-18-9-17  
Qtr/Qtr SW/NW Section 18 Township 9S Range 17E  
Lease Serial Number UTU-72106  
API Number 43-013-50499

Spud Notice – Spud is the initial spudding of the well, not drilling  
out below a casing string.

Date/Time 7/1/11      9:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing  
times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 7/1/11      3:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks \_\_\_\_\_

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address

Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1947 FNL 0693 FWL

Section 18 T9S R17E

5. Lease Serial No.

USA UTU-72106

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

GMBU

8. Well Name and No.

GRTR MON BUTTE G-18-9-17

9. API Well No.

4301350499

10. Field and Pool, or Exploratory Area

GREATER MB UNIT

11. County or Parish, State

DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Spud Notice	
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 7/5/11 MIRU Ross #29. Spud well @9:00 AM. Drill 315' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24# csgn. Set @ 317.52. On 7/6/11 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 5 barrels cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Title

Branden Arnold

Signature

Date

07/06/2011

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

**RECEIVED**

**JUL 12 2011**

**DIV. OF OIL, GAS & MINING**



## NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8" CASING SET AT	317.52
----------------------	--------

LAST CASING                      14    SET AT                      7

DATUM 12

DATUM TO CUT OFF CASING	12
-------------------------	----

DATUM TO BRADENHEAD FLANGE 12

TD DRILLER                      315                      LOGGER

HOLE SIZE 12 1/4"

OPERATOR **Newfield Exploration Company**

WELL **GMBU G-18-9-17**

FIELD/PROSPECT Monument Butte

CONTRACTOR & RIG # **Ross # 29**

## LOG OF CASING STRING:

[illegible]

CASING INVENTORY BAL.	FEET	JTS	TOTAL LENGTH OF STRING	307.52
TOTAL LENGTH OF STRING	307.52	7	LESS CUT OFF PIECE	2
LESS NON CSG. ITEMS	2.32		PLUS DATUM TO T/CUT OFF CSG	12
PLUS FULL JTS. LEFT OUT	0		CASING SET DEPTH	<b>317.52</b>
TOTAL	305.2	7	} COMPARE	
TOTAL CSG. DEL. (W/O THRS)				
TIMING				
BEGIN RUN CSG. Spud	9:00 AM	7/5/2011	GOOD CIRC THRU JOB	Yes
CSG. IN HOLE	2:00 AM	7/5/2011	Bbls CMT CIRC TO SURFACE	
BEGIN CIRC	12:42 PM	7/6/2011	RECIPROCATED PIPI	No
BEGIN PUMP CMT	1:01 PM	7/6/2011		
BEGIN DSPL. CMT	1:10 PM	7/6/2011	BUMPED PLUG TO	520
PLUG DOWN	1:11 PM	7/6/2011		

[illegible]

COMPANY REPRESENTATIVE

## Branden Arnold

DATE **7/6/2011**

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM -FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3630  
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	18/30	4304751498	RIO GRANDE 16-13-4-1W	SESE	13	4S	1W	UINTAH	6/24/2011	7/21/11
WELL 1 COMMENTS: GRRV											
<b>CONFIDENTIAL</b>											
B	99999	17400	4301350656	GMBU P-32-8-17	SWSW	32	8S	17E	DUCHESNE	6/23/2011	7/21/11
GRRV BHL = SWSW											
B	99999	17400	4301350494	GMBU K-17-9-17	NWSW	16	9S	17E	DUCHESNE	6/30/2011	7/21/11
GRRV BHL = Sec 17 SENE											
B	99999	17400	4301350471	GMBU O-11-9-16	NESE	10	9S	16E	DUCHESNE	6/29/2011	7/21/11
GRRV BHL = Sec 11 NWSW											
B	99999	17400	4301350543	GMBU Y-11-9-16	SESE	10	9S	16E	DUCHESNE	6/27/2011	7/21/11
GRRV BHL = Sec 11 SWSW											
B	99999	17400	4301350499	GMBU G-18-9-17	SWNW	18	9S	17E	DUCHESNE	7/5/2011	7/21/11
GRRV BHL = NENW											


ACTION CODES (See instructions on back of form)

- A - new entity for new well (single well only)
- B - well to existing entity (group or unit well)
- C - from one existing entity to another existing entity
- D - well from one existing entity to a new entity
- E - other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

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JUL 07 2011

DIV. OF OIL, GAS & MINING

Signature:   
Jentri Park  
Production Clerk  
07/07/11

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-72106
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> GREATER MON BUTTE G-18-9-17
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1947 FNL 0693 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 17.0E Meridian: S		<b>9. API NUMBER:</b> 43013504990000
<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE		<b>COUNTY:</b> DUCHESNE
<b>STATE:</b> UTAH		
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> APD EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input checked="" type="checkbox"/> OTHER	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/9/2011	OTHER: <span style="border: 1px solid black; padding: 2px;">Weekly Status Report</span>	
<input type="checkbox"/> SPUD REPORT Date of Spud:		
<input type="checkbox"/> DRILLING REPORT Report Date:		
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> The above well was completed on 08/09/2011. Attached is a daily completion status report.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY</b>		
<b>NAME (PLEASE PRINT)</b> Jennifer Peatross	<b>PHONE NUMBER</b> 435 646-4885	<b>TITLE</b> Production Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/12/2011	



## Daily Activity Report

Format For Sundry

**GMBU G-18-9-17**

**6/1/2011 To 10/30/2011**

**7/28/2011 Day: 1**

**Completion**

Rigless on 7/28/2011 - Run CBL & perforate stg #1. - Install 5m frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6057' & cement top @ 80'. Perforate stage #1, A3 sds @ (5204'-05') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 3 shots. A3 sds @ (5200'-01') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 3 shots. A3 sds @ (5182'-83') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 3 shots. A3 sds @ (5173'-74') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 3 shots. A3 sds @ (5167'-68') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 3 shots. A1 sds @ (5122'-24') w/ 3 1/8" Port plug guns ( 11 gram .36" EH 16.82" pen w/120° phasing) w/ 3 spf for total of 6 shots. RD H/O truck & The Perforators WLT & mast. Wait on frac crew EWTR 144 BBLS

**Daily Cost:** \$0

**Cumulative Cost:** \$17,628

---

**7/29/2011 Day: 2**

**Completion**

Rigless on 7/29/2011 - Frac & flow well. - RU PSI. Set CBP & perf D2 sds as shown in perforation report. RU Baker Hughes. Frac D2 sds as shown in stimulation report. 1282 BWTR. - RU PSI. Set CBP & perf PB10 sds as shown in perforation report. RU Baker Hughes. Frac PB10 sds as shown in stimulation report. 1667 BWTR. - RU Baker Hughes. Frac A3/A1 sds as shown in stimulation report. 858 BWTR. - RU PSI. Set CBP & perf GB6 sds as shown in perforation report. RU Baker Hughes. Frac GB6 sds as shown in stimulation report. 2019 BWTR. RD Baker Hughes & PSI wireline. Open well to pit for immediate flowback @ approx. 3 bpm. Well flowed for 3.5 hrs & died. Recovered 440 bbls. SIWFN. 1579 BWTR.

**Daily Cost:** \$0

**Cumulative Cost:** \$125,720

---

**8/5/2011 Day: 3**

**Completion**

WWS #3 on 8/5/2011 - Drilling out plugs - LOAM from GMB N-18 to G-18 MIRU chk pressure on well 100 psi. ND camron BOPS nu 5000 # BOPs RU Floor & tbg works unload tdg PU & Talley used 4 3/4 chomp bit & tbg TIH tag fill @ 4114. RU Nabors Power swivel clean cut 146 of fill to plug @ 4260 drill out plug 21 min cont. pu & TIH tag fill @ 4455 @ clean out 15' of fill to Plug @ 4470 drill out plug 19 min cont PU & TIH tag fill @ 4671 POOH to 4632 circ well clean swin @ 18:00

**Daily Cost:** \$0

**Cumulative Cost:** \$131,475

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**8/9/2011 Day: 4**

**Completion**

WWS #3 on 8/9/2011 - DU CBP. C/O to PBTD. Swab. - Cont. RIH w/ tbg. Tag fill @ 4671'. C/O to CBP @ 4840'. DU CBP in 20 min. Cont. RIH w/ tbg. Tag fill @ 5923'. C/O to PBTD @ 6090'. Circulate well clean. Pull up to 5990'. RIH w/ swab. SFL @ surface. Made 16 runs.

**RECEIVED** Aug. 12, 2011

Recovered 145 bbls. Trace of oil. EFL @ 2100'. SWIFN. - Cont. RIH w/ tbg. Tag fill @ 4671'. C/O to CBP @ 4840'. DU CBP in 20 min. Cont. RIH w/ tbg. Tag fill @ 5923'. C/O to PBTD @ 6090'. Circulate well clean. Pull up to 5990'. RIH w/ swab. SFL @ surface. Made 16 runs. Recovered 145 bbls. Trace of oil. EFL @ 2100'. SWIFN. - SICP @ 300 psi, SITP @ 100 psi. Bleed off well. RIH w/ tbg. Tag PBTD @ 6090' (no new fill). LD extra tbg. POOH w/ tbg. LD BHA. RIH w/ production tbg. ND BOP. Set TAC @ 5138' w/ 18,000# tension. NU wellhead. X-over for rods. Flush tbg. w/ 60 bbls water. RIH w/ rod string. Seat pump. RU pumping unit. Hang off rods. Fill tbg. w/ 3 bbls water. Stroke test to 800 psi. Good pump action. RD. PWOP @ 5:30 p.m. 144" stroke length, 5 spm. Final Report. 1350 BWTR. - SICP @ 300 psi, SITP @ 100 psi. Bleed off well. RIH w/ tbg. Tag PBTD @ 6090' (no new fill). LD extra tbg. POOH w/ tbg. LD BHA. RIH w/ production tbg. ND BOP. Set TAC @ 5138' w/ 18,000# tension. NU wellhead. X-over for rods. Flush tbg. w/ 60 bbls water. RIH w/ rod string. Seat pump. RU pumping unit. Hang off rods. Fill tbg. w/ 3 bbls water. Stroke test to 800 psi. Good pump action. RD. PWOP @ 5:30 p.m. 144" stroke length, 5 spm. Final Report. 1350 BWTR.

**Finalized****Daily Cost:** \$0**Cumulative Cost:** \$183,210

---

**Pertinent Files:** [Go to File List](#)

**RECEIVED** Aug. 12, 2011

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
UTU-721061a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,  
Other: \_\_\_\_\_

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.  
GMBU2. Name of Operator  
NEWFIELD EXPLORATION COMPANY8. Lease Name and Well No.  
GMBU G-18-9-173. Address  
1401 17TH ST. SUITE 1000 DENVER, CO 802023a. Phone No. (include area code)  
(435) 646-37219. AFI Well No.  
43-013-50499

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 1947' FNL &amp; 693' FWL (SW/NW) SEC. 18, T9S, R17E (UTU-72106)

10. Field and Pool or Exploratory  
MONUMENT BUTTE11. Sec., T., R., M., on Block and  
Survey or Area  
SEC. 18, T9S, R17E

At top prod. interval reported below 1349' FNL &amp; 1231' FWL (NW/NW) SEC. 18, T9S, R17E (UTU-72106)

12. County or Parish

DUCHESNE

13. State

UT

At total depth 980' FNL &amp; 1567' FWL (NE/NW) SEC. 18, T9S, R17E (UTU-72106) bhl by HSM

14. Date Spudded  
07/05/201115. Date T.D. Reached  
07/19/201116. Date Completed 08/05/2011  
☐ D & A ☒ Ready to Prod.17. Elevations (DF, RKB, RT, GL)\*  
5467' GL 5479' KB18. Total Depth: MD 6147'  
TVD 5983'19. Plug Back T.D.: MD 6090'  
TVD 592820. Depth Bridge Plug Set: MD  
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each) **BHL**  
DUAL IND GRD, SP, COMP. DENSITY, COMP. NEUTRON, GR, CALIPER, CMT BOND22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit report)  
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	8-5/8" J-55	24#	0	315'		160 CLASS G			
7-7/8"	5-1/2" J-55	15.5#	0	6137'		275 PRIMLITE		80'	
						400 50/50 POZ			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	EOT@ 5274'	TA @ 5140'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Green River	4168'	5205'	5122-5205'	.36"	21	
B)			4168-4756'	.34"	48	
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
4168-5205'	Frac w/ 203348#s 20/40 sand in 1394 bbls of Lightning 17 fluid in 4 stages.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
8/9/11	8/19/11	24	→	35	0	28			2-1/2" x 1-3/4" x 20' x 24' RHAC Pump
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→					PRODUCING	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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\*(See instructions and spaces for additional data on page 2)

DIV. OF OIL, GAS &amp; MINING

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

## 29. Disposition of Gas (Solid, used for fuel, vented, etc.)

USED FOR FUEL

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

## GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	4168'	5205'		GARDEN GULCH MRK GARDEN GULCH 1	3613' 3823'
				GARDEN GULCH 2 POINT 3	3944' 4206'
				X MRKR Y MRKR	4476' 4513'
				DOUGLAS CREEK MRK BI CARBONATE MRK	4644' 4893'
				B LIMESTON MRK CASTLE PEAK	5013' 5517'
				BASAL CARBONATE WASATCH	5972' 6106'

## 32. Additional remarks (include plugging procedure):

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)     
 ☐ Geologic Report     
 ☐ DST Report     
 ☒ Directional Survey  
☐ Sundry Notice for plugging and cement verification     
 ☐ Core Analysis     
 ☒ Other: Drilling Daily Activity

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Jennifer Peatross

Title Production Technician

Signature

Date 10/06/2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212; make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)



**NEWFIELD**

# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)**

**SECTION 18 T9S R17E**

**G-18-9-17**

**Wellbore #1**

**Design: Actual**

## **Standard Survey Report**

**19 July, 2011**

**PAYZONE**  
DIRECTIONAL



# PayZone Directional Services, LLC.

## Survey Report



Company:	NEWFIELD EXPLORATION	Local Co-ordinate Reference:	Well G-18-9-17
Project:	USGS Myton SW (UT)	TVD Reference:	G-18-9-17 @ 5479.0ft (Newfield Rig #3)
Site:	SECTION 18 T9S R17E	MD Reference:	G-18-9-17 @ 5479.0ft (Newfield Rig #3)
Well:	G-18-9-17	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 2003.21 Single User Db

Project	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	SECTION 18 T9S R17E		
Site Position:		Northing:	7,183,900.00 ft
From:	Map	Easting:	2,049,800.00 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 1' 56.921 N
		Longitude:	110° 2' 16.332 W
		Grid Convergence:	0.94 °

Well	G-18-9-17, SHL LAT: 40° 01' 57.92, LONG: -110° 03' 21.12					
Well Position	+N/-S	0.0 ft	Northing:	7,183,919.20 ft	Latitude:	40° 1' 57.920 N
	+E/-W	0.0 ft	Easting:	2,044,759.94 ft	Longitude:	110° 3' 21.120 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	5,479.0 ft	Ground Level:	5,467.0 ft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2010/09/07	11.41	65.81	52,341

Design	Actual				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	41.86	

Survey Program	Date 2011/07/19				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
331.0	6,147.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
331.0	0.31	51.44	331.0	0.6	0.7	0.9	0.09	0.09	0.00
361.0	0.44	55.62	361.0	0.7	0.9	1.1	0.44	0.43	13.93
391.0	0.35	55.62	391.0	0.8	1.0	1.3	0.30	-0.30	0.00
422.0	0.26	65.99	422.0	0.9	1.2	1.4	0.34	-0.29	33.45
453.0	0.44	62.91	453.0	1.0	1.3	1.6	0.58	0.58	-9.94
483.0	0.31	36.81	483.0	1.1	1.5	1.8	0.70	-0.43	-87.00
514.0	0.40	72.71	514.0	1.2	1.6	2.0	0.76	0.29	115.81
544.0	0.46	52.65	544.0	1.3	1.8	2.2	0.54	0.20	-66.87
575.0	0.40	41.69	575.0	1.4	2.0	2.4	0.33	-0.19	-35.35
605.0	0.97	59.05	605.0	1.6	2.3	2.8	2.00	1.90	57.87
636.0	1.36	62.25	636.0	1.9	2.9	3.4	1.27	1.26	10.32
667.0	2.11	56.67	667.0	2.4	3.7	4.2	2.48	2.42	-18.00



# PayZone Directional Services, LLC.

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 18 T9S R17E  
**Well:** G-18-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well G-18-9-17  
**TVD Reference:** G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
**MD Reference:** G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
697.0	2.46	56.62	696.9	3.1	4.7	5.4	1.17	1.17	-0.17
729.0	2.86	48.85	728.9	4.0	5.8	6.9	1.68	1.25	-24.28
759.0	3.03	35.12	758.9	5.1	6.8	8.4	2.41	0.57	-45.77
789.0	3.50	37.29	788.8	6.5	7.9	10.1	1.62	1.57	7.23
820.0	3.99	37.80	819.8	8.1	9.1	12.1	1.58	1.58	1.65
850.0	4.39	40.08	849.7	9.8	10.5	14.3	1.44	1.33	7.60
881.0	4.66	41.34	880.6	11.7	12.1	16.7	0.93	0.87	4.06
911.0	4.97	42.25	910.5	13.6	13.7	19.3	1.06	1.03	3.03
942.0	5.10	43.00	941.4	15.6	15.6	22.0	0.47	0.42	2.42
975.0	5.40	44.50	974.2	17.7	17.7	25.0	1.00	0.91	4.55
1,006.0	6.10	48.20	1,005.1	19.9	19.9	28.1	2.55	2.26	11.94
1,046.0	6.60	47.20	1,044.8	22.8	23.2	32.5	1.28	1.25	-2.50
1,068.0	7.20	48.10	1,066.7	24.6	25.2	35.1	2.77	2.73	4.09
1,100.0	7.70	47.10	1,098.4	27.4	28.2	39.3	1.61	1.56	-3.13
1,132.0	8.30	47.80	1,130.1	30.4	31.5	43.7	1.90	1.88	2.19
1,163.0	8.90	47.30	1,160.7	33.6	34.9	48.3	1.95	1.94	-1.61
1,194.0	9.50	46.20	1,191.3	37.0	38.5	53.2	2.02	1.94	-3.55
1,227.0	10.00	44.40	1,223.8	40.9	42.5	58.8	1.77	1.52	-5.45
1,257.0	10.50	42.40	1,253.4	44.8	46.2	64.2	2.05	1.67	-6.67
1,289.0	10.90	40.60	1,284.8	49.2	50.1	70.1	1.63	1.25	-5.63
1,322.0	11.40	39.00	1,317.2	54.1	54.2	76.5	1.78	1.52	-4.85
1,384.0	12.20	41.50	1,377.9	63.8	62.4	89.1	1.53	1.29	4.03
1,412.0	12.60	41.40	1,405.2	68.3	66.4	95.2	1.43	1.43	-0.36
1,447.0	12.90	42.50	1,439.4	74.0	71.5	102.9	1.10	0.86	3.14
1,478.0	13.10	42.30	1,469.6	79.2	76.2	109.8	0.66	0.65	-0.65
1,510.0	13.00	41.50	1,500.7	84.6	81.0	117.1	0.65	-0.31	-2.50
1,541.0	13.10	41.50	1,530.9	89.8	85.7	124.1	0.32	0.32	0.00
1,573.0	13.30	42.70	1,562.1	95.2	90.6	131.4	1.06	0.63	3.75
1,604.0	13.50	45.20	1,592.3	100.4	95.6	138.6	1.98	0.65	8.06
1,636.0	13.60	46.10	1,623.4	105.7	100.9	146.0	0.73	0.31	2.81
1,667.0	14.20	45.20	1,653.5	110.9	106.3	153.5	2.06	1.94	-2.90
1,699.0	14.80	44.80	1,684.4	116.5	111.9	161.5	1.90	1.88	-1.25
1,730.0	15.10	45.50	1,714.4	122.2	117.6	169.5	1.13	0.97	2.26
1,762.0	15.00	45.30	1,745.3	128.0	123.5	177.7	0.35	-0.31	-0.63
1,793.0	15.10	45.80	1,775.2	133.6	129.3	185.8	0.53	0.32	1.61
1,825.0	15.50	45.30	1,806.1	139.5	135.3	194.2	1.32	1.25	-1.56
1,856.0	16.00	43.90	1,835.9	145.5	141.2	202.6	2.03	1.61	-4.52
1,888.0	16.40	42.50	1,866.7	152.0	147.3	211.5	1.75	1.25	-4.38
1,919.0	16.50	40.50	1,896.4	158.6	153.1	220.3	1.86	0.32	-6.45
1,951.0	16.60	38.90	1,927.1	165.6	158.9	229.4	1.46	0.31	-5.00
1,982.0	16.40	38.50	1,956.8	172.5	164.4	238.2	0.74	-0.65	-1.29
2,014.0	16.10	38.20	1,987.5	179.5	170.0	247.2	0.97	-0.94	-0.94
2,045.0	15.90	37.80	2,017.3	186.3	175.3	255.7	0.74	-0.65	-1.29
2,077.0	15.60	37.40	2,048.1	193.1	180.6	264.3	1.00	-0.94	-1.25
2,108.0	15.40	37.10	2,078.0	199.7	185.6	272.6	0.70	-0.65	-0.97
2,139.0	15.78	38.22	2,107.8	206.3	190.7	280.9	1.56	1.23	3.61
2,171.0	16.04	39.32	2,138.6	213.2	196.2	289.7	1.24	0.81	3.44
2,202.0	15.78	39.27	2,168.4	219.7	201.5	298.2	0.84	-0.84	-0.16
2,234.0	15.82	39.75	2,199.2	226.5	207.1	306.9	0.43	0.13	1.50
2,267.0	15.73	40.02	2,231.0	233.4	212.8	315.8	0.35	-0.27	0.82
2,298.0	15.56	40.28	2,260.8	239.7	218.2	324.2	0.59	-0.55	0.84
2,330.0	15.29	40.37	2,291.7	246.2	223.7	332.7	0.85	-0.84	0.28
2,361.0	14.71	40.41	2,321.6	252.3	228.9	340.7	1.87	-1.87	0.13
2,392.0	14.68	39.97	2,351.6	258.4	234.0	348.6	0.37	-0.10	-1.42



# PayZone Directional Services, LLC.

## Survey Report



Company:	NEWFIELD EXPLORATION	Local Co-ordinate Reference:	Well G-18-9-17
Project:	USGS Myton SW (UT)	TVD Reference:	G-18-9-17 @ 5479.0ft (Newfield Rig #3)
Site:	SECTION 18 T9S R17E	MD Reference:	G-18-9-17 @ 5479.0ft (Newfield Rig #3)
Well:	G-18-9-17	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,423.0	14.37	39.32	2,381.6	264.3	239.0	356.3	1.13	-1.00	-2.10
2,455.0	13.79	39.54	2,412.6	270.4	243.9	364.1	1.82	-1.81	0.69
2,486.0	13.80	39.45	2,442.8	276.1	248.6	371.5	0.08	0.03	-0.29
2,517.0	13.93	40.28	2,472.9	281.8	253.4	378.9	0.77	0.42	2.68
2,550.0	13.63	40.43	2,504.9	287.7	258.5	386.8	0.92	-0.91	0.45
2,581.0	13.58	40.59	2,535.0	293.3	263.2	394.1	0.20	-0.16	0.52
2,611.0	14.15	41.69	2,564.2	298.7	267.9	401.3	2.09	1.90	3.67
2,643.0	14.98	43.72	2,595.1	304.6	273.4	409.3	3.04	2.59	6.34
2,675.0	15.34	43.93	2,626.0	310.7	279.2	417.7	1.14	1.13	0.66
2,706.0	15.69	43.62	2,655.9	316.6	284.9	426.0	1.16	1.13	-1.00
2,737.0	15.91	43.53	2,685.7	322.8	290.7	434.4	0.71	0.71	-0.29
2,768.0	16.08	44.06	2,715.5	328.9	296.7	442.9	0.72	0.55	1.71
2,800.0	15.35	43.40	2,746.3	335.2	302.6	451.6	2.35	-2.28	-2.06
2,831.0	14.90	41.64	2,776.2	341.1	308.1	459.7	2.07	-1.45	-5.68
2,862.0	14.72	40.81	2,806.2	347.1	313.3	467.6	0.90	-0.58	-2.68
2,893.0	15.12	40.68	2,836.2	353.1	318.5	475.6	1.29	1.29	-0.42
2,925.0	15.56	41.20	2,867.0	359.5	324.1	484.0	1.44	1.38	1.63
2,957.0	15.06	41.30	2,897.9	365.9	329.7	492.5	1.56	-1.56	0.31
2,991.0	14.02	39.93	2,930.8	372.4	335.2	501.0	3.22	-3.06	-4.03
3,023.0	13.89	40.02	2,961.9	378.3	340.2	508.7	0.41	-0.41	0.28
3,054.0	14.24	41.64	2,991.9	384.0	345.1	516.3	1.70	1.13	5.23
3,085.0	14.63	43.18	3,022.0	389.7	350.3	524.0	1.77	1.26	4.97
3,117.0	15.03	44.28	3,052.9	395.6	356.0	532.2	1.53	1.25	3.44
3,148.0	15.71	45.34	3,082.8	401.4	361.8	540.4	2.37	2.19	3.42
3,179.0	15.34	45.78	3,112.6	407.2	367.7	548.7	1.25	-1.19	1.42
3,210.0	15.42	43.67	3,142.5	413.1	373.5	556.9	1.82	0.26	-6.81
3,244.0	15.51	41.83	3,175.3	419.7	379.6	565.9	1.47	0.26	-5.41
3,275.0	15.34	40.90	3,205.2	425.9	385.1	574.2	0.97	-0.55	-3.00
3,306.0	15.40	40.60	3,235.1	432.2	390.4	582.4	0.32	0.19	-0.97
3,338.0	15.30	40.00	3,265.9	438.6	395.9	590.9	0.59	-0.31	-1.88
3,369.0	14.90	39.40	3,295.9	444.8	401.1	598.9	1.39	-1.29	-1.94
3,401.0	14.70	39.50	3,326.8	451.1	406.3	607.1	0.63	-0.63	0.31
3,436.0	14.90	39.60	3,360.6	458.0	412.0	616.0	0.58	0.57	0.29
3,464.0	14.70	40.80	3,387.7	463.5	416.6	623.2	1.31	-0.71	4.29
3,495.0	14.90	41.70	3,417.7	469.4	421.8	631.1	0.98	0.65	2.90
3,527.0	15.30	42.80	3,448.6	475.6	427.4	639.4	1.54	1.25	3.44
3,558.0	15.60	42.70	3,478.5	481.7	433.0	647.7	0.97	0.97	-0.32
3,590.0	15.40	42.40	3,509.3	488.0	438.8	656.3	0.67	-0.63	-0.94
3,621.0	14.90	41.80	3,539.2	494.0	444.2	664.4	1.69	-1.61	-1.94
3,653.0	14.20	41.30	3,570.2	500.0	449.6	672.4	2.22	-2.19	-1.56
3,684.0	14.10	40.60	3,600.3	505.7	454.5	680.0	0.64	-0.32	-2.26
3,716.0	14.40	41.30	3,631.3	511.7	459.7	687.8	1.08	0.94	2.19
3,747.0	14.60	41.60	3,661.3	517.5	464.8	695.6	0.69	0.65	0.97
3,779.0	15.00	43.20	3,692.2	523.5	470.3	703.8	1.79	1.25	5.00
3,810.0	15.50	45.10	3,722.1	529.4	476.0	711.9	2.28	1.61	6.13
3,842.0	15.90	45.00	3,752.9	535.5	482.2	720.6	1.25	1.25	-0.31
3,873.0	16.10	44.00	3,782.7	541.6	488.1	729.1	1.10	0.65	-3.23
3,905.0	16.30	42.90	3,813.5	548.1	494.3	738.0	1.14	0.63	-3.44
3,936.0	16.30	41.80	3,843.2	554.5	500.1	746.7	1.00	0.00	-3.55
3,968.0	16.10	41.80	3,873.9	561.2	506.1	755.7	0.63	-0.63	0.00
3,999.0	15.60	41.40	3,903.8	567.5	511.7	764.1	1.65	-1.61	-1.29
4,031.0	15.10	40.70	3,934.6	573.9	517.3	772.6	1.67	-1.56	-2.19
4,062.0	14.85	40.55	3,964.6	580.0	522.5	780.6	0.82	-0.81	-0.48
4,095.0	14.55	40.46	3,996.5	586.3	527.9	789.0	0.91	-0.91	-0.27





# PayZone Directional Services, LLC.

## Survey Report



Company: NEWFIELD EXPLORATION  
Project: USGS Myton SW (UT)  
Site: SECTION 18 T9S R17E  
Well: G-18-9-17  
Wellbore: Wellbore #1  
Design: Actual

Local Co-ordinate Reference: Well G-18-9-17  
TVD Reference: G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
MD Reference: G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
North Reference: True  
Survey Calculation Method: Minimum Curvature  
Database: EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,126.0	14.59	41.03	4,026.5	592.2	533.0	796.8	0.48	0.13	1.84
4,157.0	14.68	41.95	4,056.5	598.1	538.2	804.6	0.80	0.29	2.97
4,188.0	14.69	42.32	4,086.5	603.9	543.5	812.5	0.30	0.03	1.19
4,220.0	14.91	43.08	4,117.4	609.9	549.0	820.6	0.92	0.69	2.38
4,251.0	14.77	43.01	4,147.4	615.7	554.4	828.6	0.46	-0.45	-0.23
4,283.0	14.33	41.86	4,178.4	621.7	559.9	836.6	1.64	-1.38	-3.59
4,314.0	13.93	40.42	4,208.4	627.4	564.9	844.2	1.72	-1.29	-4.65
4,345.0	13.21	40.28	4,238.6	632.9	569.6	851.5	2.32	-2.32	-0.45
4,376.0	13.84	41.51	4,268.7	638.4	574.3	858.7	2.23	2.03	3.97
4,408.0	14.28	42.79	4,299.7	644.2	579.5	866.5	1.68	1.38	4.00
4,439.0	14.72	43.84	4,329.7	649.8	584.9	874.2	1.65	1.42	3.39
4,470.0	14.24	44.24	4,359.8	655.4	590.2	882.0	1.58	-1.55	1.29
4,502.0	13.73	43.83	4,390.8	660.9	595.6	889.7	1.62	-1.59	-1.28
4,533.0	13.40	41.64	4,420.9	666.3	600.6	897.0	1.97	-1.06	-7.06
4,564.0	13.45	41.07	4,451.1	671.7	605.3	904.2	0.46	0.16	-1.84
4,596.0	13.58	41.42	4,482.2	677.3	610.2	911.7	0.48	0.41	1.09
4,630.0	13.80	41.95	4,515.2	683.3	615.6	919.7	0.74	0.85	1.56
4,661.0	14.20	43.60	4,545.3	688.8	620.7	927.2	1.82	1.29	5.32
4,693.0	14.50	44.30	4,576.3	694.5	626.2	935.1	1.08	0.94	2.19
4,724.0	14.60	44.10	4,606.3	700.1	631.6	942.9	0.36	0.32	-0.65
4,756.0	14.90	45.20	4,637.3	705.9	637.3	951.0	1.28	0.94	3.44
4,787.0	15.20	45.20	4,667.2	711.6	643.1	959.1	0.97	0.97	0.00
4,819.0	15.00	44.00	4,698.1	717.5	648.9	967.4	1.16	-0.63	-3.75
4,820.7	14.99	43.88	4,699.7	717.8	649.2	967.8	1.94	-0.68	-7.01
<b>G-18-9-17 TGT</b>									
4,850.0	14.80	41.80	4,728.1	723.3	654.3	975.4	1.94	-0.64	-7.10
4,882.0	14.60	41.00	4,759.0	729.4	659.7	983.5	0.89	-0.63	-2.50
4,913.0	14.60	40.50	4,789.0	735.3	664.8	991.3	0.41	0.00	-1.61
4,945.0	14.80	40.90	4,820.0	741.5	670.1	999.4	0.70	0.63	1.25
4,976.0	14.90	39.80	4,849.9	747.6	675.2	1,007.4	0.96	0.32	-3.55
5,008.0	15.00	38.40	4,880.9	754.0	680.4	1,015.6	1.17	0.31	-4.38
5,039.0	15.30	38.80	4,910.8	760.3	685.5	1,023.7	1.02	0.97	1.29
5,071.0	15.30	38.00	4,941.6	766.9	690.7	1,032.1	0.66	0.00	-2.50
5,102.0	15.00	38.70	4,971.6	773.3	695.8	1,040.2	1.13	-0.97	2.26
5,134.0	14.90	39.40	5,002.5	779.7	701.0	1,048.5	0.65	-0.31	2.19
5,165.0	15.30	40.30	5,032.4	785.9	706.2	1,056.5	1.50	1.29	2.90
5,197.0	15.70	39.80	5,063.3	792.4	711.7	1,065.1	1.32	1.25	-1.56
5,228.0	15.34	39.67	5,093.1	798.8	717.0	1,073.4	1.17	-1.16	-0.42
5,259.0	14.28	38.44	5,123.1	805.0	721.9	1,081.3	3.57	-3.42	-3.97
5,292.0	13.93	39.05	5,155.1	811.2	727.0	1,089.3	1.15	-1.06	1.85
5,323.0	13.62	42.61	5,185.2	816.8	731.8	1,096.7	2.91	-1.00	11.48
5,356.0	14.28	46.13	5,217.2	822.5	737.4	1,104.6	3.26	2.00	10.67
5,386.0	14.28	47.71	5,246.3	827.5	742.8	1,112.0	1.30	0.00	5.27
5,417.0	14.90	48.68	5,276.3	832.8	748.6	1,119.8	2.15	2.00	3.13
5,448.0	15.25	47.40	5,306.2	838.1	754.6	1,127.8	1.56	1.13	-4.13
5,480.0	14.77	45.64	5,337.1	843.8	760.6	1,136.0	2.07	-1.50	-5.50
5,511.0	14.19	42.30	5,367.2	849.4	766.0	1,143.8	3.28	-1.87	-10.77
5,543.0	13.80	40.68	5,398.2	855.2	771.1	1,151.5	1.73	-1.22	-5.06
5,574.0	14.06	41.04	5,428.3	860.9	776.0	1,159.0	0.88	0.84	1.16
5,607.0	14.19	42.66	5,460.3	866.9	781.4	1,167.0	1.26	0.39	4.91
5,639.0	14.11	42.22	5,491.3	872.6	786.6	1,174.9	0.42	-0.25	-1.38
5,670.0	14.15	42.39	5,521.4	878.2	791.7	1,182.4	0.19	0.13	0.55
5,701.0	14.38	42.49	5,551.4	883.9	796.9	1,190.1	0.75	0.74	0.32
5,732.0	14.72	43.18	5,581.4	889.6	802.2	1,197.8	1.23	1.10	2.23



# PayZone Directional Services, LLC.

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 18 T9S R17E  
**Well:** G-18-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well G-18-9-17  
**TVD Reference:** G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
**MD Reference:** G-18-9-17 @ 5479.0ft (Newfield Rig #3)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,765.0	14.85	42.74	5,613.4	895.7	807.9	1,206.3	0.52	0.39	-1.33
5,796.0	14.99	42.83	5,643.3	901.6	813.4	1,214.2	0.46	0.45	0.29
5,827.0	14.60	41.30	5,673.3	907.5	818.7	1,222.2	1.78	-1.26	-4.94
5,859.0	14.40	40.90	5,704.3	913.5	823.9	1,230.2	0.70	-0.63	-1.25
5,890.0	14.50	40.00	5,734.3	919.4	828.9	1,237.9	0.79	0.32	-2.90
5,922.0	14.90	40.50	5,765.2	925.6	834.2	1,246.0	1.31	1.25	1.56
5,953.0	14.90	41.60	5,795.2	931.6	839.4	1,254.0	0.91	0.00	3.55
5,985.0	15.20	43.70	5,826.1	937.7	845.1	1,262.3	1.94	0.94	6.56
6,016.0	14.50	45.00	5,856.1	943.4	850.6	1,270.2	2.50	-2.26	4.19
6,048.0	14.60	44.70	5,887.0	949.1	856.3	1,278.3	0.39	0.31	-0.94
6,079.0	15.00	43.70	5,917.0	954.8	861.8	1,286.2	1.53	1.29	-3.23
6,095.0	14.60	42.90	5,932.5	957.7	864.6	1,290.3	2.81	-2.50	-5.00
6,147.0	14.60	42.90	5,982.8	967.3	873.5	1,303.4	0.00	0.00	0.00

### Wellbore Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
G-18-9-17 TGT - actual wellpath misses target center by 4.6ft at 4820.7ft MD (4699.7 TVD, 717.8 N, 649.2 E) - Circle (radius 75.0)	0.00	0.93	4,700.0	720.2	645.2	7,184,649.69	2,045,393.47	40° 2' 5.037 N	110° 3' 12.824 W

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# NEWFIELD



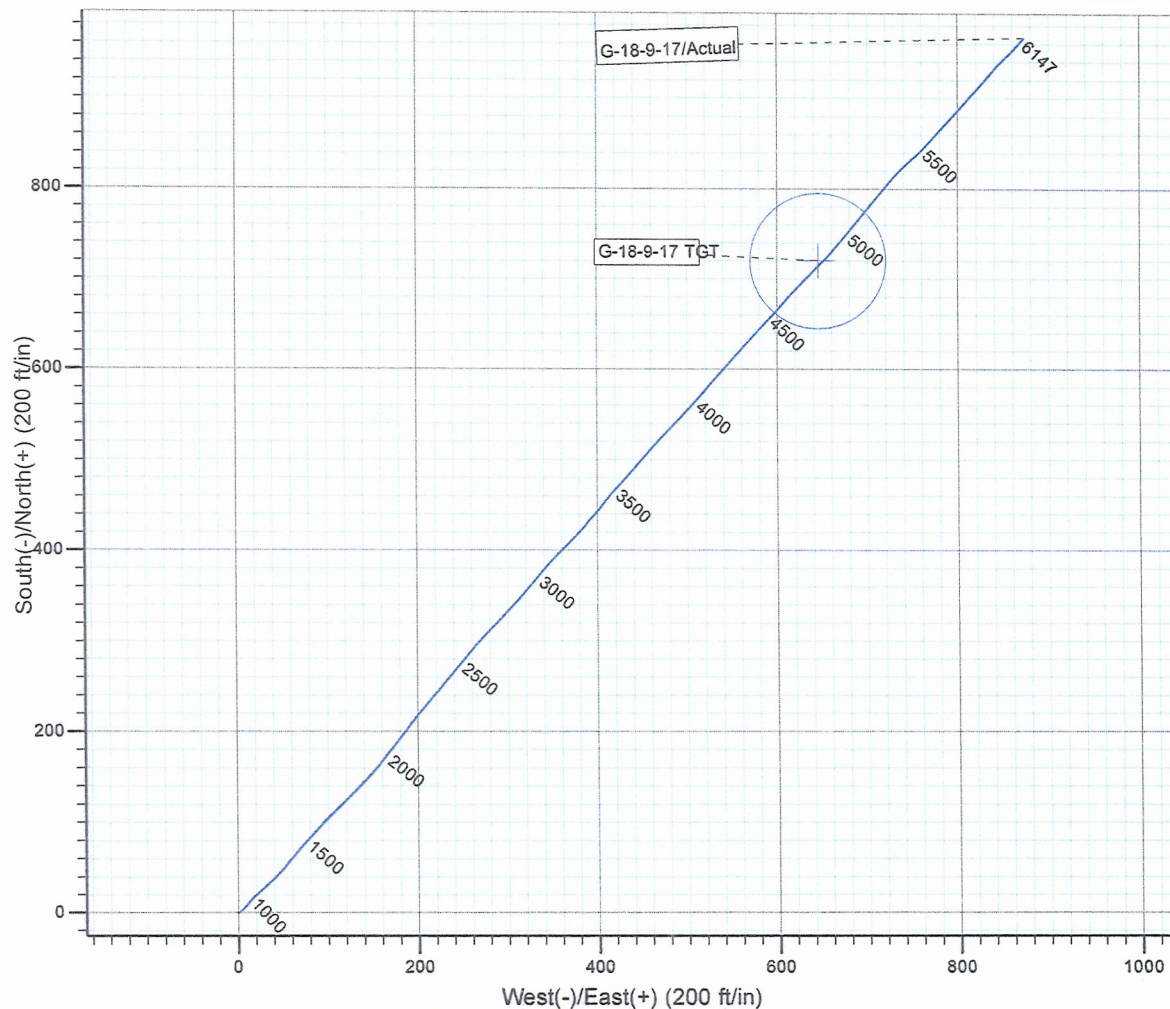
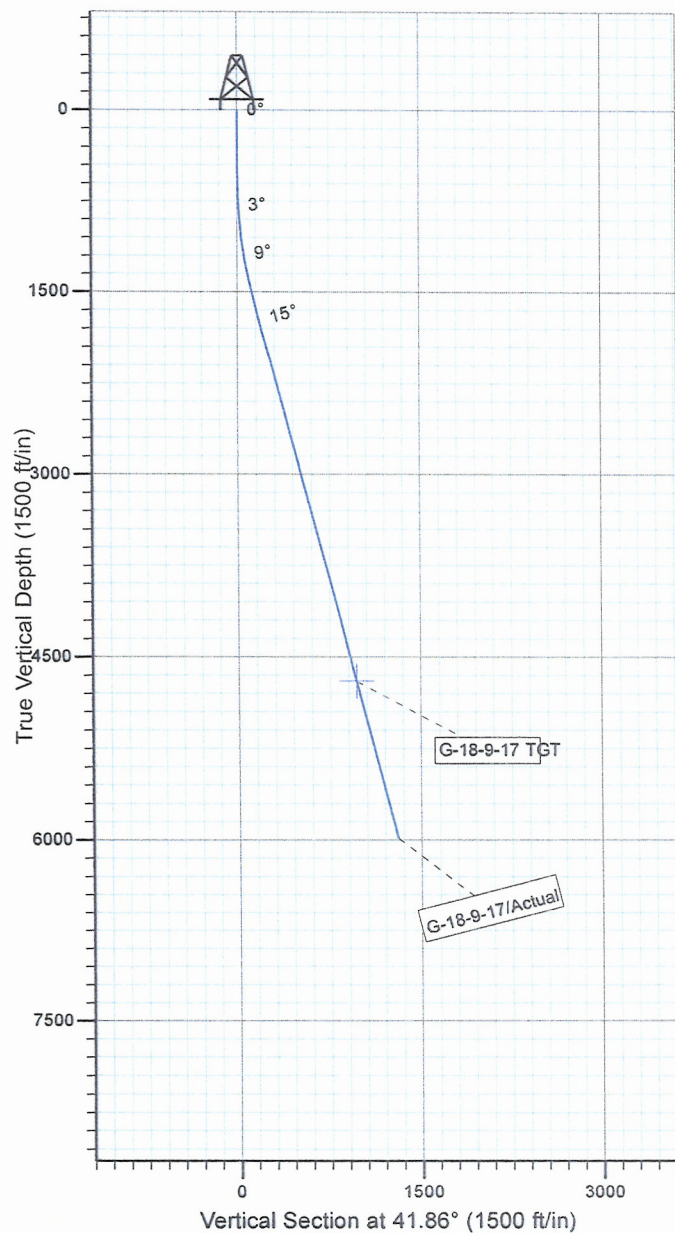
Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9S R17E  
 Well: G-18-9-17  
 Wellbore: Wellbore #1  
 SURVEY: Actual

FINAL SURVEY REPORT



Azimuths to True North  
 Magnetic North: 11.41°

Magnetic Field  
 Strength: 52341.1snT  
 Dip Angle: 65.81°  
 Date: 2010/09/07  
 Model: IGRF2010



Design: Actual (G-18-9-17/Wellbore #1)



Created By: Sarah Webb Date: 21:24, July 19 2011  
 THIS SURVEY IS CORRECT TO THE BEST OF MY  
 KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.

**Daily Activity Report****Format For Sundry****GMBU G-18-9-17****4/1/2011 To 10/30/2011****GMBU G-18-9-17****Waiting on Cement****Date:** 7/6/2011

Ross #29 at 315. Days Since Spud - yield. Returned 5bbls to pit, bump plug to 520psi, BLM and State were notified of spud via email. - On 7/5/11 Ross #29 spud and drilled 315' of 12 1/4" hole, P/U and run 7 jts of 8 5/8" casing set - 317.52'KB. On 7/6/11 cement w/BJ w/160 sks of class G+2%kcl+.25#CF mixed @ 15.8ppg and 1.17

**Daily Cost:** \$0**Cumulative Cost:** \$56,696

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**GMBU G-18-9-17****Drill 7 7/8" hole with fresh water****Date:** 7/15/2011

NDSI #3 at 940. 1 Days Since Spud - P/U BHA as follows: Smith Mi616 PDC bit, Hunting 4.8 stage 7/8 lobe .33 res mud motor 26.84', Monel - good. Then the surface casing to 1500 psi for 30 min. test good. BLM was present for test. - valve. Test the kill line and valve. Then the pipe rams and manifold. 2000 psi for ten min. all test - Pressure test upper kelly, safety valve, pipe rams, inside valve, outside valve, choke line and - MIRU Set all equipment (Skid rig from the N-18-9-17) - 7/13/2011 at 4:00 PM. - Inform State and BLM via email on 7/13/2011 of rig move on 7/14/2011 at 7:00 am and BOP test on - drill collar 30.10, gap sub 3.38', index sub 1.88', monel drill collar 30.35' nm cross over the 6 - 4.5" HWDP. Tag cement at 275'. - Drill 7 7/8" hole from 275' to 940' 10,000 lbs WOB, 400 GPM, 160 GPM and 120.9 ft/hr AVG ROP - Rig up floor and hydromatic

**Daily Cost:** \$0**Cumulative Cost:** \$92,705

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**GMBU G-18-9-17****Drill 7 7/8" hole with fresh water****Date:** 7/16/2011

NDSI #3 at 3295. 2 Days Since Spud - Rig service. Function test BOP and crown-o-matic - Drill 7 7/8" hole from 940' to 2191' 20,000 lbs WOB, 400 GPM, 160 GPM and 109 ft/hr AVG ROP - Drill 7 7/8" hole from 2191' to 3295' 20,000 lbs WOB, 400 GPM, 160 GPM and 92 ft/hr AVG ROP

**Daily Cost:** \$0**Cumulative Cost:** \$126,479

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**GMBU G-18-9-17****Drill 7 7/8" hole with fresh water****Date:** 7/17/2011

NDSI #3 at 4682. 3 Days Since Spud - Drill 7 7/8" hole from 4070' to 4682' 20,000 lbs WOB, 400 GPM, 160 GPM and 51 ft/hr AVG ROP - Drill 7 7/8" hole from 3295' to 4070' 20,000 lbs WOB, 400 GPM, 160 GPM and 67 ft/hr AVG ROP - Rig Service. Function test BOP and crown-o-matic

**Daily Cost:** \$0**Cumulative Cost:** \$148,648

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**GMBU G-18-9-17****Drill 7 7/8" hole with fresh water****Date:** 7/18/2011

NDSI #3 at 5848. 4 Days Since Spud - Rig Service. Function test BOP and crown-o-matic - Drill 7 7/8" hole from 4682' to 5280' 20,000 lbs WOB, 400 GPM, 160 GPM and 56 ft/hr AVG



ROP - Drill 7 7/8" hole from 5280' to 5848' 20,000 lbs WOB, 400 GPM, 160 GPM and 52 ft/hr  
AVG ROP

**Daily Cost:** \$0

**Cumulative Cost:** \$257,274

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**GMBU G-18-9-17**

**Running casing**

**Date:** 7/19/2011

NDSI #3 at 6147. 5 Days Since Spud - Run Halliburton logs loggers TD 6146 - Lay Down drill pipe - Lay down BHA - Drill 7 7/8" hole from 5848' to 6147' 20,000 lbs WOB, 400 GPM, 160 GPM and 56 ft/hr AVG ROP - Circulate Bottoms up - Lay down drill pipe to 4000FT - Kelly up spot brine water

**Daily Cost:** \$0

**Cumulative Cost:** \$285,193

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**GMBU G-18-9-17**

**Wait on Completion**

**Date:** 7/20/2011

NDSI #3 at 6147. 6 Days Since Spud - Float collar set @ 6090.39' KB, pick up extra jt tag and lay down, P/U Mandrill and landing jt - JSA w/ on coming crew, run 140jt 5.5 15.5# j-55 LTC 1 mandrill and tag - Guide Shoe set @ 6137.12' KB - total csg on location 149 jts Plus 1 landing jt- Transfer 6 jts + 2 landing jt - to GMB W-7-9-17 - Circulate csg - CMT w/BJ Pump 275 sks PL II +3% KCL +5#CSE+0.5#CF+2#KOL+.5SMS+FP+SF mixed @ 11ppg - yield @ 3.54 Then tail of 400 sk 50:50:2+3%KCL+0.5%EC-1+.25# SK CF+.05#SF+.3SMS+FP-6L - Clean Mud tanks - Tear down - release rig @ 1900 7/19/11 - Mixed @ 14.4 ppg yeild @ 1.24 return 30 bbls to pit Bump plug to 2240 psi **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$339,836

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**Pertinent Files: [Go to File List](#)**